BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER)		
COMPANY'S APPLICATION FOR)	CASE NO	. IPC-E-21-17
AUTHORITY TO INCREASE ITS RATES)		
FOR ELECTRIC SERVICE TO RECOVER)		
COSTS ASSOCIATED WITH THE JIM)		
BRIDGER POWER PLANT.)		
)		
)		

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

RYAN N. ADELMAN

- 1 Q. Please state your name and business address.
- 2 A. My name is Ryan Adelman. My business address
- 3 is 1221 West Idaho Street, Boise, Idaho 83702.
- 4 Q. By whom are you employed and in what capacity?
- 5 A. I am employed by Idaho Power Company ("Idaho
- 6 Power" or "Company") as the Vice President of Power Supply.
- 7 Q. Please describe your educational background.
- 8 A. I graduated in 1996 from the University of
- 9 Idaho, Moscow, Idaho, receiving a Bachelor of Science
- 10 Degree in Civil Engineering. I am a registered
- 11 professional engineer in the state of Idaho. In 2018, I
- 12 earned a Master of Business Administration through Boise
- 13 State University's Executive MBA program. In 2019, I
- 14 completed the Energy Executive Course through the
- 15 University of Idaho.
- Q. Please describe your work experience with
- 17 Idaho Power.
- A. From 2004 to 2008, I was employed by Idaho
- 19 Power as an engineer in Power Production's Civil
- 20 Engineering Group. In 2008, I became an Engineering
- 21 Leader, initially responsible for the Langley Gulch power
- 22 plant project and later the Power Production Civil
- 23 Engineering Department. In 2015 I was promoted to Senior
- 24 Manager of the Projects Department where I managed the
- 25 Project Management and Cost and Controls group. In 2018, I

- 1 led the Company's Southeast Idaho area as a Regional
- 2 Manager. In 2019, I was promoted to Vice President of
- 3 Transmission and Distribution Engineering and Construction,
- 4 later renamed to Planning, Engineering and Construction. In
- 5 2020, I transitioned to my current position, Vice President
- 6 of Power Supply, where my responsibilities include
- 7 supervision over Idaho Power's jointly-owned coal assets,
- 8 load serving operations and merchant activities.
- 9 Q. What is the purpose of your testimony in this
- 10 proceeding?
- 11 A. The purpose of my testimony is to discuss the
- 12 changes in the position of the Jim Bridger power plant
- 13 ("Bridger") in Idaho Power's generation portfolio. In
- 14 addition, I will discuss the prudence of investments made
- 15 at Bridger that have been added to the associated plant
- 16 balances since the Company's last general rate case, Case
- 17 No. IPC-E-11-08, and to inform the Idaho Public Utilities
- 18 Commission ("Commission") of necessary future investments
- 19 at the plant to ensure Bridger continues to be available
- 20 for reliable load service through the end of 2030.
- Q. Have you prepared any exhibits detailing the
- 22 investments made at Bridger since January 1, 2012?
- 23 A. Yes. Exhibit No. 3 details Idaho Power's
- 24 share of the investments made at Bridger between January 1,
- 25 2012, and December 31, 2020. Projects for which the

- 1 Company's ownership share is over \$1,000,000 include a
- 2 project description and investment purpose classification
- 3 for environmental compliance or for reliability.

4 I. THE BRIDGER PLANT

- 5 Q. Please describe the Bridger plant.
- A. The Bridger plant located near Rock Springs,
- 7 Wyoming consists of four generating units. PacifiCorp has
- 8 two-thirds ownership and is the operator of the facility.
- 9 Idaho Power owns one-third, or 771 megawatts ("MW") of
- 10 Bridger. Unit 1 began commercial operation in 1974, Unit 2
- 11 in 1975, Unit 3 in 1976 and Unit 4 in 1979. Idaho Power's
- 12 one-third share of the units' nominal net (or "net
- 13 reliable") generation capacities are 177 MW, 180 MW, 174 MW
- 14 and 175 MW, respectively. The Company and PacifiCorp
- 15 (collectively, the "Co-Owners") work jointly to make
- 16 decisions regarding the plant, including required
- 17 investments and the retirement of the plant.
- 18 The plant is connected to the Borah West
- 19 transmission path, 345 kilovolt ("kV"), 230 kV, and 138 kV
- 20 transmission lines west of the Borah Substation near
- 21 American Falls, Idaho. Idaho Power's one-third share of
- 22 energy from Bridger flows west over this path. The Idaho-
- 23 Wyoming path, or Bridger West, consists of three 345 kV
- 24 transmission lines between Bridger and southeastern Idaho.

¹ Generator nameplate rating.

- 1 The Company owns 800 MW of the 2,400 MW east-to-west
- 2 capacity which effectively feeds into the Borah West path
- 3 when power is moving east to west from Bridger.
- 4 The Bridger plant is adjacent to Idaho Power and
- 5 PacifiCorp's co-owned Bridger Coal Company mine.
- 6 Additionally, coal is delivered to Bridger from the Black
- 7 Butte mine via rail. Coal combustion residuals are
- 8 disposed of on plant property in a solid waste landfill and
- 9 a flue gas desulfurization waste surface impoundment. The
- 10 plant also utilizes evaporation ponds, which makes it
- 11 effectively a "zero-discharge" facility.
- 12 Q. Please describe the current agreements under
- 13 which the Co-Owners own and operate Bridger.
- 14 A. Currently, the ownership and operation of
- 15 Bridger is dictated by three agreements: the Agreement for
- 16 the Ownership of the Jim Bridger Project between Idaho
- 17 Power Company and Pacific Power & Light Company, the
- 18 Agreement for the Construction of the Jim Bridger Project
- 19 between Idaho Power Company and Pacific Power & Light
- 20 Company, and the Agreement for the Operation of the Jim
- 21 Bridger Project between Idaho Power Company and Pacific
- 22 Power & Light Company ("Operation Agreement"), all of which
- 23 are dated September 22, 1969, as amended by Amendments 1
- 24 through 9 (collectively, "Bridger Agreements"). The Bridger
- 25 Agreements set forth the respective obligations of the Co-

- 1 Owners with respect to the ownership, construction and
- 2 operation of Bridger.
- 3 Q. How have the Co-Owners been operating Bridger?
- 4 A. The coal units deliver generating capacity and
- 5 energy during high-demand periods as well as during periods
- 6 having high wholesale-electric market prices. Bridger
- 7 provides highly valuable capacity during periods of peak
- 8 demand, but also low cost and dispatchable baseload energy.
- 9 In addition, Bridger specifically provides recognized
- 10 flexible ramping capability to demonstrate ramping
- 11 preparedness to maintain system reliability as well as to
- 12 comply with Federal Energy Regulatory Commission regulation
- 13 and Energy Imbalance Market participant rules.

14 II. BRIDGER IN IDAHO POWER'S GENERATION PORTFOLIO

- 15 Q. In his direct testimony, Company witness
- 16 Matthew Larkin states that the current depreciable life at
- 17 the Bridger plant reflects a 2034 end-of-life for all four
- 18 units. Has the Company performed any analysis since the
- 19 2034 end-of-life date was determined to identify economic
- 20 impacts of an earlier exit from coal-fired operations at
- 21 Bridger?
- 22 A. Yes. Idaho Power's Second Amended 2019
- 23 Integrated Resource Plan ("IRP"), which was acknowledged by
- 24 the Commission with Order No. 34959, identified a preferred

- 1 portfolio that included early Bridger unit exits in 2022,
- 2 2026, 2028, and 2030, concluding the earlier exit from
- 3 Bridger would provide a more favorable economic outcome as
- 4 compared to an end-of-life assumption of 2034.
- 5 Q. Are there any future environmental
- 6 regulations that could affect the operation of Bridger
- 7 prior to 2034?
- 8 A. Yes. Units 1 and 2 currently require
- 9 Selective Catalytic Reduction ("SCR") controls to be
- 10 installed and operational by year-end 2021 and 2022 for
- 11 continued unrestricted operations through 2034. As I will
- 12 discuss later in my testimony, SCR controls investments
- were made on Units 3 and 4 in 2015 and 2016, respectively.
- 14 For Units 1 and 2, PacifiCorp, as operator of the plant,
- 15 has submitted an application to the State of Wyoming for a
- 16 Regional Haze Reassessment, which could provide an
- 17 alternative to SCR controls installation. The state of
- 18 Wyoming approved a revision to the Wyoming Regional Haze
- 19 State Implementation Plan ("Wyoming Regional Haze SIP")
- 20 that established emission limitations on Bridger as a whole
- 21 (single stack) in lieu of installing SCR controls on
- 22 Bridger Units 1 and 2. The revision has been proposed for
- 23 approval by the U.S. Environmental Protection Agency
- 24 ("EPA"), Region 8 and was submitted to the Office of the

- 1 Federal Register. The co-owners are currently awaiting
- 2 action from the incoming Administration.
- 3 Q. In light of these regulations, were the
- 4 potential significant investments in Units 1 and 2 included
- 5 in the Second Amended 2019 IRP?
- A. No. Because there is still uncertainty
- 7 around the effect of final regulation, the SCR controls
- 8 investment on Units 1 and 2 were not planned or included in
- 9 the cost estimates in Idaho Power's Second Amended 2019 IRP
- 10 analysis.
- 11 Q. Do the existing Bridger Agreements contain
- 12 specified terms and provisions that would inform the
- 13 process by which PacifiCorp or Idaho Power could end
- 14 participation in a Bridger unit during the time the other
- 15 co-owner wishes to continue operations?
- 16 A. No. The Bridger Agreements do not
- 17 contemplate a scenario in which one co-owner chooses to
- 18 exit a single or all units during the time the other co-
- 19 owner wishes to continue operations. In its 2019 IRP,
- 20 acknowledged in Case No. PAC-E-19-16, PacifiCorp identified
- 21 different exit dates for each Bridger unit, with the first
- 22 unit being exited in 2023. The Co-Owners have not
- 23 developed contractual terms that would be necessary to
- 24 allow for the potential earlier exit of a Bridger unit by

- 1 one co-owner, and not both Co-Owners. As committed to in
- 2 the Action Plan of the Second Amended 2019 IRP, Idaho Power
- 3 has begun discussions with PacifiCorp about early exits
- 4 from the Bridger units.
- 5 Q. Will Idaho Power continue to evaluate
- 6 alternative exit dates for the Bridger units as an
- 7 agreement with PacifiCorp is developed and executed?
- 8 A. Yes. In addition to working with PacifiCorp
- 9 to reach agreement on the exit of a Bridger unit or for the
- 10 potential synchronization of exit dates, the Company will
- 11 continue to evaluate the appropriate exit dates for the
- 12 units within development of the 2021 IRP, in pursuit of the
- 13 least cost, least risk alternative for customers.
- 14 III. BRIDGER CAPITAL BUDGET PARTICIPATION
- As a one-third owner in the plant, is Idaho
- 16 Power involved in the decision-making process related to
- 17 capital investments at Bridger?
- 18 A. Yes. As the plant operator, PacifiCorp
- 19 manages the capital budget for Bridger. However, the
- 20 Company is and always has been actively involved in the
- 21 decision-making process in all matters associated with
- 22 Bridger capital investments as a co-owner. While
- 23 PacifiCorp, as the operator, vets and analyzes the need for
- 24 specific capital replacements as they arise to continue

- 1 reliable and safe operation of the plant, Idaho Power
- 2 regularly participates in discussions of the capital
- 3 investment forecast prepared by PacifiCorp, influencing the
- 4 investments ultimately made.
- 5 Q. What documentation does the Company have
- 6 available as the one-third owner and non-operating partner?
- 7 A. Idaho Power receives from PacifiCorp a
- 8 monthly billing invoice, invoice support documentation, and
- 9 monthly invoice reconciliation. Appropriation Requests are
- 10 available for every project, which include a project
- 11 description, investment reason, project number, and
- 12 projected expenditures for the project, by year. During
- 13 the quarterly Ownership Meetings, Idaho Power reviews the
- 14 current year O&M and capital budgets and forecasts.
- Does Idaho Power have any contractual rights
- 16 to approve items such as capital spend?
- 17 A. Yes. Under Section 5.4 of the Operation
- 18 Agreement, each October PacifiCorp will submit a forecast
- 19 of its estimate of operating expenses for the following
- 20 calendar year, including capital projects, to Idaho Power.
- 21 The budget will include items of expenditures for
- 22 replacement and repair of facilities and will include a
- 23 contingency for emergency repairs and replacements. The
- 24 forecast is subject to approval by the Company. Under the

- 1 agreement, if the forecast for projects changes by 10
- 2 percent or more during the calendar year, PacifiCorp will
- 3 notify Idaho Power. In addition, under compliance with the
- 4 Sarbanes-Oxley Act, forecasts for projects over \$1 million
- 5 that change by 10 percent or more during the calendar year
- 6 must be approved by both Co-Owners.
- 7 Q. Please describe the Company's participation
- 8 in the Bridger capital investment discussions that meet the
- 9 contractual rights described above.
- 10 A. Mid-year, the Co-Owners hold a capital
- 11 budget review where the forecasted capital projects
- 12 expected to occur over the next three calendar years over
- 13 \$50,000 are discussed in detail. In addition, large
- 14 capital projects expected over the next decade are
- 15 reviewed. Unit overhauls, which I will explain later in my
- 16 testimony, and the scope and need of projects are
- 17 discussed. Following the meeting, plant personnel
- 18 consolidates and finalizes the list of all projects,
- 19 including the scope, need and consequence for each.
- 20 Following the quarterly Ownership Meeting that
- 21 occurs in September, the plant personnel present a formal
- 22 capital and operations and maintenance ("O&M") expense
- 23 budget for the following year as well as a high level 10-
- 24 year forecast. The intent of the meeting is for the Co-

- 1 Owners to ask questions of the plant personnel, most often
- 2 the subject matter experts, about any details surrounding
- 3 the forecasted capital investments and O&M expense.
- 4 Q. How does the Company monitor the budget?
- 5 A. During each quarterly Ownership Meeting, a
- 6 standing agenda item is to review the current year capital
- 7 and O&M expense budget, routinely providing Idaho Power the
- 8 opportunity to raise any questions necessary about upcoming
- 9 projects. Additionally, on a monthly basis, forecasts for
- 10 capital and O&M expense are provided for review by the
- 11 Company.

12 IV. BRIDGER INVESTMENTS SINCE 2011

- 13 Q. What is the time period for which Idaho Power
- 14 is requesting a prudence review of Bridger investments for
- 15 purposes of recovery in customer rates?
- 16 A. Idaho Power's last general rate case, Case No.
- 17 IPC-E-11-08, used a 2011 test year as a basis for plant
- 18 values. Therefore, the Company is requesting a prudence
- 19 determination on incremental Bridger investments since the
- 20 last rate case, or those investments made at the plant
- 21 during the January 1, 2012, through December 31, 2020, time
- 22 period. There have been a number of investments required
- 23 to operate the plant in a safe, efficient, and reliable
- 24 manner, including investments required to ensure

- 1 environmental compliance as well as a number of investments
- 2 for routine maintenance and repair.
- 3 Q. Have you identified the investments made at
- 4 Bridger during the January 1, 2012, through December 31,
- 5 2020, time period?
- A. Yes. Exhibit No. 3 presents Idaho Power's
- 7 share of the investments made at Bridger between January 1,
- 8 2012, and December 31, 2020, detailing 841 different
- 9 projects totaling \$266.3 million. In addition, for those
- 10 projects for which Idaho Power's ownership share is over \$1
- 11 million, the Company has included a project description and
- 12 investment purpose classification as to whether the
- 13 investment was for environmental compliance or for
- 14 reliability. Of the 24 projects over \$1 million, nine were
- 15 required for environmental compliance and 15 for the
- 16 continued reliable operation of Bridger.
- Q. Were all the projects comprising the \$266.3
- 18 million in investment that occurred between the 2011 test
- 19 year and December 31, 2020, necessary for either
- 20 environmental compliance, the safe and economic operation
- 21 of the plant, or for reliability purposes?
- 22 A. Yes.

23 Environmental Compliance Investments

- Q. What investments over \$1 million have been
- 25 made for environmental compliance since January 1, 2012?

- 1 A. The investments made at Bridger for
- 2 environmental compliance make up nearly 50 percent of the
- 3 total Bridger investments since January 1, 2012, with the
- 4 two largest being the SCR controls installation on Units 3
- 5 and 4. In total, of the projects over \$1 million, nine
- 6 were required for environmental compliance. Aside from the
- 7 SCR controls, other projects include: (1) mercury controls
- 8 additions on all four units, (2) replacement of the
- 9 catalyst of the SCR control on Unit 3, (3) modifications to
- 10 the coal combustion residuals effluent system, and (4) the
- 11 relining of the scrubber absorber lining on Unit 4.
- 12 Q. Please explain the installation of the SCR
- 13 controls on Units 3 and 4.
- 14 A. The investments in SCR controls on Units 3
- 15 and 4 are the two largest investments made at Bridger since
- 16 2011, totaling \$58.29 million and \$51.65 million,
- 17 respectively. These emission control investments were made
- 18 to reduce nitrogen oxide emissions from Bridger Units 3 and
- 19 4 in compliance with state and federal emission
- 20 requirements. Each SCR control system is comprised of two
- 21 separate universal reactors, with multiple catalyst levels,
- 22 inlet and outlet ductwork, a shared ammonia reagent system,
- 23 an economizer upgrade, structural reinforcement of the
- 24 boiler and flue gas path ductwork and equipment, and

- 1 included the extension of the existing plant distributed
- 2 control system. An induced draft fan upgrade and an
- 3 associated auxiliary power system variable frequency drive
- 4 insertion was required on Unit 4 as well.
- 5 Q. Why did Units 3 and 4 have SCR controls
- 6 installed first?
- 7 A. The SCR controls were installed on Units 3 and
- 8 4 first because it coordinated with Bridger planned unit
- 9 overhaul schedules and the requirement for SCR controls
- 10 installation on PacifiCorp's other plants. Lead time and
- 11 construction schedules for SCR controls necessitated a
- 12 coordinated installation in the PacifiCorp fleet.
- Q. Which state and federal emission requirements
- 14 did the Bridger SCR controls satisfy?
- 15 A. The Bridger SCR controls were required to
- 16 comply with the Clean Air Act Regional Haze Rules and
- 17 the resulting Wyoming Regional Haze State Implementation
- 18 Plan ("Wyoming Regional Haze SIP"). The Clean Air Act
- 19 required each state to develop plans to meet various air
- 20 quality requirements, Wyoming's plan is referred to as the
- 21 Wyoming Regional Haze SIP. The state of Wyoming was
- 22 required to submit its Wyoming Regional Haze SIP to the
- 23 EPA for approval.
- Q. What is the intent of the Wyoming Regional
- 25 Haze SIP?

- 1 A. The Wyoming Regional Haze SIP must assure
- 2 reasonable progress towards the national goal of achieving
- 3 natural visibility conditions in national parks and
- 4 wilderness areas by the year 2064, including a requirement
- 5 that certain categories of existing major stationary
- 6 sources permitted or built between 1962 and 1977, including
- 7 the Bridger plant, procure, install, and operate within the
- 8 emission limitation established by the Best Available
- 9 Retrofit Technology ("BART") pollution control standard, as
- 10 determined by Wyoming. This was defined as the first phase
- 11 while the second phase of the Wyoming Regional Haze SIP was
- 12 to determine the Long-Term Strategy to continue to reduce
- 13 regional haze in the Wyoming national park and wilderness
- 14 areas.
- Q. What efforts were undergone to evaluate
- 16 available emissions control technologies for BART-eligible
- 17 sources?
- A. As part of the BART review, the Co-Owners
- 19 engaged CH2MHILL to prepare an evaluation of several
- 20 technologies on their ability to economically achieve
- 21 compliance and support an integrated approach to control
- 22 criteria pollutants (e.g., sulfur dioxide, nitrogen oxide,
- 23 and particulate matter for the facility), if it were to
- 24 continue to operate and to burn coal. The BART analyses
- 25 reviewed available retrofit emission control technologies

- 1 and their associated performance and cost metrics. Each
- 2 technology was reviewed against its ability to meet a
- 3 presumptive BART emission limits based on technology and
- 4 fuel characteristics, the cost for each, and the projected
- 5 improvement in visibility which can be expected by the
- 6 installation of the respective technology.
- Next, for each unit subject to BART, the state
- 8 environmental regulatory agencies identified the
- 9 appropriate control technology to achieve what the air
- 10 quality regulators determined were cost-effective emission
- 11 reductions. Wyoming's BART determination included the
- 12 installation of low nitrogen oxide burners and overfire air
- 13 ports, which were incorporated into both the BART permits
- 14 issued for Bridger as well as the Wyoming Regional Haze SIP
- 15 and were subsequently installed on all four units. In
- 16 addition, the SCR controls were included in the Wyoming
- 17 Regional Haze SIP as part of the Long-Term Strategy to meet
- 18 the goals required as part of the second phase.
- 19 Q. Did the EPA take action on the Wyoming
- 20 Regional Haze SIP?
- 21 A. Yes. The EPA chose to approve and disapprove
- 22 portions of the Wyoming Regional Haze SIP in its "re-
- 23 proposal" on May 23, 2013, with final approval on January
- 24 30, 2014. As part of its re-proposal, the EPA approved

- 1 Wyoming's determination of the Long-Term Strategy of
- 2 installing SCRs on Units 3 and 4 in 2015 and 2016,
- 3 respectively and Units 1 and 2 in 2021 and 2022.
- 4 Enforceable by the EPA, nitrogen oxide limits for Bridger
- 5 Units 3 and 4 were established at an SCR-based emissions
- 6 limit of 0.07 lb/MMBtu, well below the 0.26 lb/MMBtu of
- 7 emissions produced at the time.
- Q. Did the Co-Owners have any alternatives to
- 9 installation of the SCR controls on Bridger Units 3 and 4?
- 10 A. No. In order to comply with the requirements
- 11 of the Wyoming Regional Haze SIP, it was necessary to
- 12 install and operate the SCR controls. Idaho Power has an
- 13 obligation to operate its facilities in compliance with its
- 14 permit requirements and the applicable laws and
- 15 regulations, as well as satisfy the Company's other
- 16 statutory requirements.
- Q. Did Idaho Power receive any additional
- 18 regulatory approval of the emissions control investments at
- 19 Bridger?
- 20 A. Yes. On June 28, 2013, the Company filed an
- 21 application with the Commission for a Certificate of Public
- 22 Convenience and Necessity ("CPCN"), seeking authorization
- 23 of its investment in SCR controls and associated ancillary
- 24 equipment in Bridger Units 3 and 4. As part of the case,
- 25 Idaho Power prepared a Coal Unit Environmental Investment

- 1 Analysis supporting the upgrade of Bridger Units 3 and 4 to
- 2 allow for the ongoing coal-fueled energy production as the
- 3 least-cost, least risk outcome for customers.
- Q. Did the Commission issue an order in Case No.
- 5 IPC-E-13-16 approving the Company's application for a CPCN
- 6 for the Bridger Unit 3 and 4 SCR controls?
- 7 A. Yes. With Order No. 32929 the Commission
- 8 confirmed that circumstances at the time required the
- 9 upgrades to Bridger Units 3 and 4 for Idaho Power to meet
- 10 environmental regulations and to continue providing
- 11 reliable energy to customers. In their order, the
- 12 Commission directed Idaho Power to file quarterly reports
- 13 updating the Commission on any changes to environmental
- 14 policy or regulations as the Bridger upgrades were
- 15 installed and placed in service. Subsequently, the
- 16 Commission issued Certificate No. 516, certifying that the
- 17 future public and convenience and necessity requires the
- 18 Bridger SCR control investments for Units 3 and 4.
- 19 Q. Did the Company comply with the Commission's
- 20 directive to file quarterly progress reports describing
- 21 changes to environmental policy or regulations that
- 22 potentially impacted the Bridger SCR controls investments
- 23 on Units 3 and 4?
- A. Yes. Idaho Power filed 13 quarterly reports,
- 25 spanning the three years between March 2014 and March 2017

- 1 in accordance with Order No. 32929. In addition to
- 2 providing environmental regulations updates, the reports
- 3 informed the Commission on the status of construction
- 4 progress, with detail by unit when applicable, and the
- 5 scheduled completion dates of major milestones. Finally,
- 6 each report included a summary of actual project costs and
- 7 a forecast of total project costs.
- In the September 2015 report, the Company provided
- 9 the results of the updated analysis for Bridger Units 3 and
- 10 4 that were included in Appendix C to Idaho Power's 2015
- 11 Integrated Resource Plan. Based on the Bridger analysis,
- 12 installation of the SCR controls on Unit 3 and 4 continued
- 13 to be the least-cost option compared to shuttering Units 3
- 14 and 4 and replacing that generation with a combined-cycle
- 15 combustion turbine resource. The Company believes it
- 16 adhered to the requirements in Order No. 32929 and that, at
- 17 the time, the SCR investments represented a low-cost and-
- 18 low risk option for serving customer demands.
- Q. What comprises the total \$58.29 million and
- 20 \$51.65 million in SCR controls investments for Bridger
- 21 Units 3 and 4, respectively?
- 22 A. The majority of the costs, approximately \$82
- 23 million excluding Allowance for Funds Used During
- 24 Construction ("AFUDC"), were associated with the
- 25 engineer, procure, and construct contract ("EPC

- 1 Contract") for the contractor that performed work on the
- 2 Bridger units.
- 3 Q. How was the contractor selected that
- 4 performed the installation of the SCR controls on Bridger
- 5 Units 3 and 4?
- A. A competitive Request for Proposal ("RFP")
- 7 process was undertaken by PacifiCorp, as operator of the
- 8 Jim Bridger Plant. With input from Idaho Power,
- 9 PacifiCorp developed an RFP package that included a
- 10 detailed scope of work, performance based technical
- 11 specifications, concept drawings, expected performance
- 12 guarantees and commercial requirements. PacifiCorp
- 13 developed a bid evaluation matrix establishing selection
- 14 criteria, allowing for a balanced outcome for tradeoffs
- 15 between cost, technical advantages, and commercial
- 16 terms.
- 17 Responses to the RFP were evaluated with a number
- 18 of rounds of additional information requests and
- 19 clarifications. The results of this extensive evaluation
- 20 resulted in a short list of the two lowest-cost evaluated
- 21 respondents that presented the best value. PacifiCorp
- 22 held further technical and commercial negotiations with
- 23 the short-listed respondents. Based on these
- 24 negotiations, the EPC contract was awarded to the
- 25 respondent that the Company and PacifiCorp felt provided

- 1 the best overall value.
- 2 Q. Aside from the EPC Contract, what made up
- 3 the remaining costs of the SCR controls investments?
- 4 A. The remaining costs were the result of work
- 5 and materials required for the installation of the SCR
- 6 controls including flue gas reinforcement for \$5 million,
- 7 economizer upgrades of \$4 million, boiler and air
- 8 preheater reinforcement work for approximately \$3
- 9 million, spare parts totaling about \$450,000, and other
- 10 miscellaneous costs totaling approximately \$4 million.
- 11 In addition, the SCR controls investment costs include
- 12 nearly \$10 million in AFUDC expenses.
- 13 Q. How did the total project costs compare to
- 14 estimated cost of the SCR controls investments at
- 15 Bridger?
- 16 A. Idaho Power's share of the SCR controls
- 17 investment on Bridger Units 3 and 4 were estimated to be
- 18 \$62.92 million and \$66.91 million, respectively.
- 19 Combined, actual costs were \$19.5 million less than the
- 20 original cost estimate. The exceptional management
- 21 oversight of the installation of the SCR controls on
- 22 Bridger Units 3 and 4 resulted in an under-budget project
- 23 that met the deadlines under the Wyoming Regional Haze
- 24 SIP.
- 25 Q. You indicated mercury controls additions were

- 1 made to all four units. Were these the next largest
- 2 investments for environmental compliance?
- 3 A. Yes. The next four investments at Bridger for
- 4 environmental compliance totaled approximately \$2.2 million
- 5 each and were for the development and implementation of
- 6 mercury controls necessary for pollutant mitigation on all
- 7 Bridger units. In 2015, each unit received an Activated
- 8 Carbon Injection ("ACI") system that removes mercury as
- 9 required by the EPA Mercury and Air Toxics Standard
- 10 ("MATS"). The ACI system injects an activated carbon into
- 11 the flue gas which is then collected in the precipitator.
- 12 Q. What was the next project required for
- 13 environmental compliance?
- 14 A. The seventh investment for environmental
- 15 compliance was for catalyst work within the SCR control
- 16 on Bridger Unit 3. Approximately every four years, the
- 17 catalyst in the SCR control must be replaced to ensure
- 18 the nitrogen oxide removal meets the emission limits as
- 19 required by the Wyoming Regional Haze SIP. This project,
- 20 totaling approximately \$1.6 million, required the
- 21 replacement of two layers of the Unit 3 SCR control
- 22 catalyst.
- Q. Please describe the final two investments over
- 24 \$1 million that were required for environmental compliance.
- 25 A. The next investment required for environmental

- 1 compliance totaled approximately \$1.4 million and was for
- 2 work on the coal combustion residuals ("CCR") effluent
- 3 system. Modifications were made to prevent CCRs from
- 4 contacting the ground or going into the evaporation pond.
- 5 New retention ponds were installed, one existing pond was
- 6 removed because it was not lined and would not meet future
- 7 environmental regulations, and new concrete lined
- 8 collection structures were constructed around the plant.
- 9 Finally, at approximately \$1.1 million, the ninth
- 10 project totaling more than \$1 million and required for
- 11 environmental compliance was for the relining of the
- 12 scrubber absorber lining on Bridger Unit 4. The original
- 13 lining was rubber and had reached the end of its life. The
- 14 work entailed the replacement of the middle one-third of
- 15 the rubber lining and the dual flow trays.
- 16 O. How much have these nine environmental
- 17 compliance investments contributed to the additions at
- 18 Boardman since January 1, 2012?
- A. At \$122.9 million, the investments for
- 20 environmental compliance are the largest expenditures made
- 21 at Bridger since 2011, making up 73 percent of the total
- 22 projects over \$1 million.

23 Plant Reliability Investments

- 24 Q. You indicated there were 15 investments
- 25 greater than \$1 million required for the reliable operation

- 1 of the plant. What was the largest investment made to
- 2 maintain reliability?
- A. In 2013, an upgrade to the Bridger Unit 2
- 4 turbines was completed for a total of \$13.5 million. The
- 5 work was split between two work orders, one for the high-
- 6 pressure turbine and one for the low-pressure turbines.
- 7 This project was specific to the two low-pressure turbines
- 8 on Unit 2. The total investment in the high-pressure
- 9 turbine work did not exceed the \$1 million project
- 10 threshold. While overhauls that replace and repair the
- 11 blades and diaphragms on turbines aid in extending the life
- 12 of the turbine and partially restore efficiency, occurring
- 13 approximately every eight years for the high pressure
- 14 turbines and 12 years for the low-pressure turbines, a
- 15 complete replacement of the turbine is often required every
- 16 15 to 20 years. The replacement lowered the heat rate and
- 17 increased the efficiency of Unit 2.
- 18 Q. Did the replacement of the low-pressure
- 19 turbines on Unit 2 require any additional work to be
- 20 performed associated with the unit?
- 21 A. Yes. The replacement of the low-pressure
- 22 turbines in Unit 2 increased the generation capacity of the
- 23 unit. However, the existing generator step-up ("GSU")
- 24 transformer would not accommodate the increase in
- 25 generation, so the GSU at Unit 2 was upgraded. The upgrade

- 1 of the GSU resulted in project costs of \$1.8 million.
- 2 Q. What additional investments were made at
- 3 Bridger to maintain reliability?
- 4 A. The next set of investments made to maintain
- 5 reliable operations of Bridger was the replacement of the
- 6 finishing superheater within the boiler of all four units.
- 7 Tube failures were occurring within the superheaters due to
- 8 dissimilar metal welds and long-term overheating, an
- 9 indication in the past that the superheaters were nearing
- 10 the end of their useful life. As can be seen in Exhibit
- 11 No. 3, the superheater replacement for each unit was
- 12 assigned a separate work order, with the total project
- 13 costs ranging from \$2.8 million to \$4.2 million per unit.
- 14 One unit replacement occurred each year from 2015 through
- 15 2018.
- 16 O. How does the dissimilar metal welds cause tube
- 17 failures?
- 18 A. Tubes that carry steam extend vertically from
- 19 the bottom of the superheater and then turn horizontally.
- 20 Over time, routine maintenance required the replacement of
- 21 the tubes to prevent failures. The replacement tubes were
- 22 different materials and were welded together, an acceptable
- 23 and, in most cases, unavoidable repair to the superheaters
- 24 made in the 1970s. The dissimilar welds began corroding
- 25 and plant personnel believed it to be the source of the

- 1 tube failures.
- 2 Q. Is long-term overheating avoidable?
- A. No. Long-term overheating is unavoidable in a
- 4 unit because pressure parts exposed to elevated
- 5 temperatures are only designed for a usable lifetime of a
- 6 superheater, the end of which was approaching for each
- 7 unit.
- 8 Q. How did the plant operator determine the
- 9 replacement of the superheaters was required?
- 10 A. Because the superheaters were nearing the end
- of their expected 30 to 35 year life span, samples were
- 12 taken from each boiler and sent to a third party for
- 13 analysis and an assessment of the remaining life of the
- 14 superheater. The results indicated, without replacement,
- 15 dissimilar metal weld failures would continue to occur. In
- 16 addition, the evidence of the long-term overheating
- 17 suggested the remaining life of the superheaters was
- 18 dwindling. The replacement of the superheater was
- 19 performed on the boiler of each unit, with a new tubing
- 20 design that consisted of a single, continuous piece to
- 21 avoid future dissimilar welds. The replacement of the
- 22 superheaters on Units 3 and 4 included an increase to the
- 23 heating surface area, as committed to by the plant in the
- 24 various documents submitted for environmental compliance
- 25 that supported the SCR controls installation investments.

- 1 These four projects make up approximately \$14.1 million of
- 2 the total investments at Bridger since 2011.
- What were the additional reliability-related
- 4 investments?
- 5 A. The next set of projects over \$1 million that
- 6 were for the continued reliable operations of Bridger were
- 7 the replacement of the cooling towers on Units 1, 2 and 3.
- 8 A structural analysis was performed on the existing wood
- 9 structure in the cooling towers of all four units and
- 10 determined that the cooling towers would fail if they were
- 11 not replaced.
- Q. What happens when a cooling tower fails?
- 13 A. Cooling towers are heat exchangers that
- 14 provide cooling water to the steam cycle of the units.
- 15 Cooling water flows from the towers to the condensers,
- 16 condensing the steam leaving the low-pressure turbines.
- 17 This cooling water will then return back to the cooling
- 18 tower, repeating the cycle. Failure in the cooling tower
- 19 would cause an extended operational outage at Bridger.
- Q. Were the wood structures replaced in the
- 21 cooling towers for Units 1, 2 and 3?
- 22 A. Yes. The wood structures were replaced in the
- 23 three cooling towers between 2013 and 2015. The structures
- 24 were replaced with a fiberglass reinforced plastic that is
- 25 designed to last the remaining life of the plant.

- Q. Was the wood structure within the cooling
- 2 tower of Unit 4 replaced?
- A. Yes, however the cooling tower for Unit 4
- 4 showed signs of failure much earlier and was rebuilt in
- 5 2004. Therefore, the costs associated with the repairs to
- 6 the Unit 4 cooling tower are not included in the Company's
- 7 request for prudence in this proceeding.
- 8 Q. Were there any other investments for
- 9 reliability that were made on all four Bridger units?
- 10 A. Yes. An inspection of the air preheaters on
- 11 all four units found the air preheater baskets to be
- 12 deteriorating. The air preheater recovers heat from the
- 13 boiler flue gas, increasing the efficiency of the unit by
- 14 reducing the heat lost in the flue gas. The replacement of
- 15 the basket ensured continued efficient heat transfer and
- 16 reduced back pressure as the flue gas exited the boiler.
- 17 The air preheater baskets on Units 3 and 4 required an
- 18 enamel coated basket for an extended life as the ammonia
- 19 injected in the SCR controls can shorten the useful life of
- 20 the baskets absent the extra protection. Each project
- 21 totaled \$1.1 million to \$1.4 million.
- Q. What was the remaining project associated with
- 23 the reliability of Bridger totaling more than \$1 million?
- A. The final investment required to maintain
- 25 reliable operations at Bridger totaled \$1.2 million and was

- 1 for the replacement of the pendant platens within the
- 2 superheater on Unit 1. Fly ash, soot blower erosion and
- 3 long-term overheating were damaging the pendant platens
- 4 which pick up the heat within the superheater. This
- 5 project replaced the entire lower section of the pendant
- 6 platens on Unit 1 in an effort to prevent extended tube
- 7 leak outages.
- 8 Q. Please summarize the investments over \$1
- 9 million made at Bridger since 2011.
- 10 A. There were 24 projects over \$1 million at the
- 11 Bridger plant between January 1, 2012, through December 31,
- 12 2020, totaling \$168.5 million. Of those, nine projects
- 13 were to maintain environmental compliance and 15 were to
- 14 maintain the reliable operation of Bridger. The majority
- 15 of the costs were associated with investments required for
- 16 environmental compliance, a total of \$122.9 million, while
- 17 the remaining \$45.6 million were investments required for
- 18 continued reliability.

19 V. FORECASTED BRIDGER INVESTMENTS

- 20 Q. Company witness Matthew Larkin indicated the
- 21 proposed levelized revenue requirement mechanism includes
- 22 investments forecasted at Bridger for all four units
- 23 through 2030, Idaho Power's expected exit from operations
- 24 of the plant. Please explain the investments expected to
- 25 be made over the remaining life of the plant.

- 1 A. While the Company is cognizant of the
- 2 approaching end-of-life of Bridger, there are investments
- 3 necessary to ensure the plant remains operational in a
- 4 safe, efficient, and reliable matter. Because the Co-Owners
- 5 do not have a definitive agreement detailing expected cost
- 6 responsibilities upon exit, Idaho Power has assumed that
- 7 once a co-owner has exited a unit, that co-owner is no
- 8 longer responsible for capital costs associated with that
- 9 unit. Common facility investments are forecasted to remain
- 10 the responsibility of a co-owner until the last unit is
- 11 exited by that co-owner. Finally, the capital addition
- 12 forecast assumes PacifiCorp's current exit dates of the
- 13 four Bridger units reflected in PacifiCorp's 2019 IRP: 2023
- 14 for Unit 1, 2028 for Unit 2, 2037 for Unit 3 and 2037 for
- 15 Unit 4.
- The largest expenditures are associated with the
- 17 major overhaul of each unit that is required every four
- 18 years. The plant performs the overhaul on one unit per
- 19 year, planning the outage years in advance as the unit may
- 20 be down for 35 to 50 days depending on the work required.
- 21 The intent of the overhaul is to perform the repairs and
- 22 upgrades on major components that cannot be performed while
- 23 the unit is online or during short outages.
- Q. What type of work is performed during the
- 25 overhaul of a unit?

- 1 A. An overhaul will include a boiler inspection
- 2 including the repairs or replacement of boiler tubes,
- 3 boiler sections, burners and burner nozzles. The turbine
- 4 will be refurbished, if needed, and the generator will be
- 5 opened and cleaned on the inside, and repairs will be made
- 6 to other major components including the boiler feed pumps,
- 7 feedwater heaters, and other major pumps, fans, and motors.
- 8 Q. What additional investments does the Company
- 9 anticipate will be required prior to Idaho Power's exit
- 10 from operations at Bridger?
- 11 A. Aside from the annual blanket projects for
- 12 pumps, valves and motors, and routine infrastructure to
- 13 maintain the reliable safe operations of the plant, the
- 14 single largest expected expenditure is required for
- 15 environmental compliance: replacement of an unlined flue
- 16 gas desulfurization ponds which must otherwise stop
- 17 receiving scrubber waste in 2023. Also in 2023, the plant
- 18 has forecasted the installation of a hydrator to allow
- 19 refined soda ash to be used as scrubber reagent.
- Q. What are blanket projects?
- 21 A. Blanket projects are intended to capture
- 22 capital issues that arise, typically equipment failures
- 23 that were unplanned and therefore not budgeted.
- Q. You discussed a project associated with an
- 25 unlined pond earlier in your testimony. Is this flue gas

- 1 desulfurization pond a similar project?
- 2 A. Yes. The CCR rules established by the EPA
- 3 apply to all unlined ponds. This project will dewater the
- 4 existing evaporation pond, install a liner, and reroute the
- 5 piping of the waste liquor to the new pond. It is expected
- 6 the existing pond will be dewatered by mid-2021, and
- 7 construction of the new flue gas desulfurization pond will
- 8 start immediately, with completion expected in 2023. The
- 9 plant anticipates other specific projects to comply with
- 10 CCR disposal requirements in 2028. The forecasted
- 11 investments, while minimal, are required for environmental
- 12 compliance or for the continued safe and reliable operation
- 13 of the plant.
- 14 VI. CONCLUSION
- 15 Q. Please summarize your testimony.
- 16 A. Idaho Power's Second Amended 2019 TRP
- 17 identified a preferred portfolio that included Bridger unit
- 18 exits in 2022, 2026, 2028, and 2030, concluding the earlier
- 19 exit from Bridger would provide a more favorable economic
- 20 outcome as compared to the current end-of-life assumption
- 21 of 2034. Idaho Power has been required to make
- 22 investments at Bridger since 2011 and has been actively
- 23 involved in the capital spend decision making process at
- 24 the plant. Of the 24 projects identified in which Idaho
- 25 Power's share of the investments was more than \$1 million,

- 1 nine projects totaling \$122.9 million were for
- 2 environmental compliance and 15 totaling \$45.6 million were
- 3 for reliability purposes. While the Company has been
- 4 cognizant of the approaching end-of-life of Bridger, the
- 5 investments made were prudent and required to ensure the
- 6 plant remains operational in a safe, efficient, and
- 7 reliable matter.
- 8 Q. Does this conclude your testimony?
- 9 A. Yes.

10

11

Τ	DECLARATION OF RYAN N. ADELMAN
2	I, Ryan N. Adelman, declare under penalty of perjury
3	under the laws of the state of Idaho:
4	1. My name is Ryan N. Adelman. I am employed
5	by Idaho Power Company as the Vice President of Power
6	Supply.
7	2. On behalf of Idaho Power, I present this
8	pre-filed direct testimony and Exhibit No. 3 in this
9	matter.
10	3. To the best of my knowledge, my pre-filed
11	direct testimony and exhibit are true and accurate.
12	I hereby declare that the above statement is true to
13	the best of my knowledge and belief, and that I understand
14	it is made for use as evidence before the Idaho Public
15	Utilities Commission and is subject to penalty for perjury.
16	SIGNED this 2^{nd} day of June 2021, at Boise, Idaho.
17	
18	D 1 All_
L9 20	Ryan N. Adelman

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION CASE NO. IPC-E-21-17

IDAHO POWER COMPANY

ADELMAN TESTIMONY

EXHIBIT NO. 3

	_								
Project	Descr	U1	U2	U3	U4	BC	Total	Purpose	Project Description/Justification The installation of Selective Catalytic Reduction ("SCR") system and associated ancillary equipment on Unit 3. The SCR system is comprised of two separate
27250405	DDDCCD DOLLCOO IN CO				ER 200 0EC		50 300 056	[minomodel	universal reactors, with multiple catalyst levels, inlet and outlet ductwork, a shared ammonia reagent system, an economizer upgrade, structural reinforcement of the boiler and flue gas path ductwork and equipment, and included the extension of the existing plant distributed control system. The investments and ancillary equipment provided for a reduction in the nitrogen oxide emissions in compliance with existing state and defearal emission requirements. The BART Appeal Settlement Agreement with the state of Wyoming and the Wyoming Regional Haze State Implementation Plan ("Wyoming Regional Haze SiP") required the installation of an SCR on Unit 3 by the end of 2015. The EPA signed a notice of final rulemaking on January 30, 2014, making
27350185	BRIDGER 2011C039 JB4 SCR				58,290,056		58,290,056	Environmental	this emission reduction requirement federally enforceable as well.
27350182	BRIDGER 2011C038 JB3 SCR SYS D			51,651,350			51,651,350	Environmental	The installation of SCR system and associated ancillary equipment on Unit 4. The SCR system is comprised of two separate universal reactors, with multiple catalyst levels, inlet and outlet ductwork, a shared ammonia reagent system, an economizer upgrade, structural reinforcement of the boiler and flue gas path ductwork and equipment, and included the extension of the existing plant distributed control system. In addition, an induced draft fan upgrade and an associated auxiliary power system variable frequency drive insertion were made on Unit 4. The investments and ancillary equipment provided for a reduction in the nitrogen oxide emissions in compliance with existing state and federal emission requirements. The BART Appeal Settlement Agreement with the state of Wyoming and the Wyoming Regional Haze SIP required the installation of an SCR on Unit 4 by the end of 2016. The EPA signed a notice of final rulemaking on January 30, 2014, making this emission reduction requirement federally enforceable as well.
									The Unit 2 turbine was in need of an upgrade to maintain efficiency. The work was split between two work orders, one for the high pressure turbine and one
27344048	BRIDGER 2008C131LP U2 TURBINE		13,520,389				13,520,389	Reliability	for the low pressure turbines. This project upgraded the two low pressure turbines on Unit 2 (each unit has two low pressure turbines). This upgrade lowered the heat rate and increased the efficiency of Unit 2.
									The finishing superheater within the boiler of all four units were replaced. These costs are specific to Unit 2. Replacement was required due to tube failures from both dissimilar metal welds and long-term overheating. Samples were taken and sent to a third party for analysis and an assessment of the remaining life. The results indicated an increase in dissimilar metal welds in the future. The long-term overheating is unavoidable in a unit as pressure parts at elevated temperatures are designed for a usable lifetime, which was nearing. These were also sampled and sent to a third party for analysis. The evidence suggested remaining life was owinding. These tube failures have been an indication of finishing superheater failures in the past and the need for a replacement.
27457815	BRIDGER 2016C052 U2 REPLACE FI		4,145,312				4,145,312	Reliability	
									The finishing superheater within the boiler of all four units were replaced. These costs are specific to Unit 3. Replacement was required due to tube failures from both dissimilar metal welds and long-term overheating. Samples were taken and sent to a third party for analysis and an assessment of the remaining life. The results indicated an increase in dissimilar metal welds in the future. The long-term overheating is unavoidable in a unit as pressure parts at elevated temperatures are designed for a usable lifetime, which was nearing. These were also sampled and sent to a third party for analysis. The evidence suggested remaining life was dwindling. These tube failures have been an indication of finishing superheater failures in the past and the need for a replacement. The finishing superheater replacement on Unit 3 also included an increase to the heating surface area as indicated in the environmental submittals that
27411888	BRIDGER 2014C037 U3 REPLACE FI			3,878,440			3,878,440	Reliability	accompanied the SCR controls projects. The finishing representation when the baller of all four units uses copied. They control are engined that the failure.
									The finishing superheater within the boiler of all four units were replaced. These costs are specific to Unit 4. Replacement was required due to tube failures from both dissimilar metal welds and long-term overheating. Samples were taken and sent to a third party for analysis and an assessment of the remaining life. The results indicated an increase in dissimilar metal welds in the future. The long-term overheating is unavoidable in a unit as pressure parts at elevated temperatures are designed for a usable lifetime, which was nearing. These were also sampled and sent to a third party for analysis. The evidence suggested remaining life was dwindling. These tube failures have been an indication of finishing superheater failures in the and and the need for a replacement. The finishing superheater replacement on Unit 4 also included an increase to the heating surface area as indicated in the environmental submittals that
27437083	BRIDGER 2015C070 U4 REPLACE FI				3,277,736		3,277,736	Reliability	accompanied the SCR controls projects. A structural analysis was performed on the existing wood structure in the cooling towers of all four units, showing the towers in Unit 3 would fail if not
27403809	BRIDGER 2014C029 U3 REPLACE CO			2,845,601			2,845,601	Reliability	replaced. The failing of a cooling tower would cause an extended operational outage. This project replaced the wood structure with a fiberglass reinforced plastic that is designed to last the remaining life of the plant.
27481633	BRIDGER 2017C067 U1 REPLACE FI	2,822,899		,, ,,,			2,822,899	Reliability	The finishing superheater within the boiler of all four units were replaced. These costs are specific to Unit 2. Replacement was required due to tube failures from both dissimilar metal welds and long-term overheating. Samples were taken and sent to a third party for analysis and an assessment of the remaining life. The results indicated an increase in dissimilar metal welds in the future. The long-term overheating is unavoidable in a unit as pressure parts at elevated temperatures are designed for a usable lifetime, which was nearing. These were also sampled and sent to a third party for analysis. The evidence suggested remaining life was dwindling. These tube failures have been an indication of finishing superheater failures in the past and the need for a replacement.
									A structural analysis was performed on the existing wood structure in the cooling towers of all four units, showing the towers in Unit 1 would fail if not
									replaced. The failing of a cooling tower would cause an extended operational outage. This project replaced the wood structure with a fiberglass reinforced
27402637	BRIDGER 2014C023 U1 REPLACE CO	2,788,360					2,788,360	Reliability	plastic that is designed to last the remaining life of the plant. A structural analysis was performed on the existing wood structure in the cooling towers of all four units, showing the towers in Unit 2 would fail if not
27371146	BRIDGER 2012C069 U2 REPLACE CO		2,748,628				2,748,628	Reliability	replaced. The failing of a cooling tower would cause an extended operational outage. This project replaced the wood structure with a fiberglass reinforced plastic that is designed to last the remaining life of the plant.
							, ,,	,	Unit 1 mercury controls development and implementation. This project installed an Activated Carbon Injection ("ACI") system on Unit 2 for the removal of
27374745	BRIDGER 2012C076 U2 MERCURY CO		2,221,588				2,221,588	Environmental	mercury as required by the Environmental Protection Agency's ("EPA") Mercury and Air Toxics Standard ("MATS"). The ACI system injects an activated carbon into the flue gas which is then collected in the precipitator.
27374749	BRIDGER 2012C078 U4 MERCURY CO				2,219,064		2,219,064	Environmental	Unit 4 mercury controls development and implementation. This project installed an ACI system on Unit 4 for the removal of mercury as required by the EPA's MATS. The ACI system injects an activated carbon into the flue gas which is then collected in the precipitator.
27374748	BRIDGER 2012C077 U3 MERCURY CO			2,203,082			2,203,082	Environmental	Unit 3 mercury controls development and implementation. This project installed an ACI system on Unit 3 for the removal of mercury as required by the EPA's MATS. The ACI system injects an activated carbon into the flue gas which is then collected in the precipitator.
27374736	BRIDGER 2012C075 U1 MERCURY CO	2,187,374					2,187,374	Environmental	Unit 1 mercury controls development and implementation. This project installed an ACI system on Unit 1 for the removal of mercury as required by the EPA's MATS. The ACI system injects an activated carbon into the flue gas which is then collected in the precipitator.
27373188	BRIDGER 2012C71 U2 GSU TRANSFO		1,814,904				1,814,904	Reliability	When the Unit 2 turbine was upgraded, the maximum capacity of the unit increased and the existing Generator Step-Up ("GSU") transformer would not accommodate this increase in generation. These costs are associated with the rewind of the GSU on Unit 2 to increase capacity.
27519307	BRIDGER 2018C113 U3 SCR CATALY			1,629,526			1,629,526	Environmental	Approximately every four years, the catalyst in the SCR control must be replaced to ensure the nitrogen oxide removal meets the emission limits as required by the Wyoming Regional Haze rules. Two layers of the catalyst in the Unit 3 SCR were replaced.
27352672	BRIDGER 2011C051 U1 REPLACE/RE	393,297	393,297	393,297	393,297		1,573,189	Reliability	The GSU transformer for Unit 1 failed and required a replacement. The GSU on Unit 1 was scrapped and a spare GSU was installed on Unit 1. These project costs are associated with the purchase of a new spare GSU for use on any of the four units.
27473622	BRIDGER 2016C099 U2 APH BASKET		1,390,721				1,390,721	Reliability	The air preheater baskets on Unit 2 were inspected and found to be deteriorating. This replacement of both the top and bottom layers ensures efficient heat transfer and reduced back pressure as the flue gas exits the boiler.
	SOEN EGEOGGS GE ALTI BASKET		1,550,721				1,050,721	nendonity	Modifications were made to the coal combision residuals ("CCR") effluent system to prevent CCRs from contacting the ground or going into the evaporation pond. New retention ponds were installed, the existing pond was removed because it was not lined, and new concrete lined collection structures were
27439233	BRIDGER 2015C077 CCR EFFLUENT					1,350,658	1,350,658	Environmental	constructed around the plant. The air preheater baskets on Unit 3 were inspected and found to be deteriorating and falling apart. This replacement of both the top and bottom layers
27433317	BRIDGER 2015C050 U3 APH BASKET			1,266,858			1,266,858	Reliability	ensures efficient heat transfer and reduced back pressure as the flue gas exits the boiler. The air preheater baskets on Unit 3 needed enamel coated baskets to extend the life because of the ammonia injected in the SCR control.
27360950	BRIDGER 2011C058 U4 APH BASKET			,,	1,230,925		1,230,925	Reliability	The air preheater baskets on Unit 4 were inspected and found to be deteriorating and falling apart. This replacement of both the top and bottom layers ensures efficient heat transfer and reduced back pressure as the flue gas exits the boiler. The air preheater baskets on Unit 4 needed enamel coated baskets to extend the life because of the ammonia injected in the SCR control.
		1 174 460							The entire lower section of the pendant platens on Unit 1 required replacement because of fly ash, soot blower erosion, and long time overheating. The
27398634	BRIDGER 2014C001 U1 PENDANT PL	1,174,469					1,174,469	Reliability	replacement prevents extending tube leak outages.

Project	Descr	U1	U2	U3	U4	BC	Total	Purpose	Project Description/Justification
									The scrubber absorber lining of Unit 4 was relined. The original lining was rubber and had reached the end of its life. This project replaced the middle one-
27463768	BRIDGER 2016C035 U4 ABSORBER R				1,112,706		1,112,706	Environmental	third of rubber lining and dual flow trays. The air preheater baskets on Unit 1 were inspected and found to be deteriorating and falling apart. This replacement of both the top and bottom layers
27499207	BRIDGER 2017C120 U1 APH BASKET	1,109,490					1,109,490	Reliability	ensures efficient heat transfer and reduced back pressure as the flue gas exits the boiler.
27441698	BRIDGER 2015C079 U4 REPLACE HO				932,637		932,637		
27363132 27445785	BRIDGER 2012C050 U4 WET STACK BRIDGER 2015C094 U3 HIP & LP B			893,540	921,632		921,632 893,540		
27383742	BRIDGER 2013C020 U2 SCRUBBER D		829,599	893,540			829,599		
27459805	BRIDGER 2016C050 CCR BOTTOM AS		0.00,000			817,269	817,269		
27355531	BRIDGER 2011C057 U4 REPLACE UP				792,329		792,329		
27439123 27355587	BRIDGER 2015C049 REPLACE 01/02 BRIDGER 2011C059 U4 REHEATER O				770,573	790,180	790,180 770,573		
27423731	JIM BRIDGER 345KV REACTOR BREA				//0,5/3	697,549	697,549		
27319641	BRIDGER 2010C024 NEW SEWAGE TR					678,413	678,413		
27405728	BRIDGER 2014C015 U1 BURNERS -	663,594					663,594		
27529748	BRIDGER 2019C015 U4 #41 ABS CO	648,931			658,943		658,943		
27501249 27553355	BRIDGER 2018C025 U1 BURNERS - BRIDGER 2020C049 U4 #43 ABS CO	648,931			613,138		648,931 613,138		
27485917	BRIDGER CITC2016C901 CRITICAL				015,150	607,833	607,833		
27465208	BRIDGER 2016C034 U4 BURNERS -				607,510		607,510		
27521483	BRIDGER 2019C010 U4 #42 ABS CO				595,808		595,808		
27435425 27479355	BRIDGER 2015C045 U3 BURNERS - BRIDGER 2017C042 U2 BURNERS MA		591,716	594,428			594,428 591,716		
27334426	BRIDGER 2010C047 MERCURY CONTR		331,710			583,220	583,220		
27457818	BRIDGER 2016C057 DCS SIMULATOR					564,506	564,506		
27521482	BRIDGER 2018C128 U3 REHEATER B			559,428		555.00	559,428		
27477414 27388379	BRIDGER 2017C036 BLANKET PUMPS BRIDGER 2013C010 U2 BURNERS MA		553,674			556,314	556,314 553,674		
27503132	BRIDGER 2013C010 02 BURNERS MA BRIDGER 2018C052 BLANKET - PUM		333,074			546,601	546,601		
27499330	BRIDGER 2018C010 U3 PRECIPITAT			542,943		. 0,002	542,943		
27495323	BRIDGER 2018C002 U1 PRECIPITAT	539,771					539,771		
27519306 27366431	BRIDGER 2018C112 U3 BURNERS MA			536,621	534,491		536,621 534,491		
27422145	BRIDGER 2012C058 U4 BURNERS - BRIDGER 2015C001 PURCHASE SPAR				534,491	528,465	528,465		
27371135	BRIDGER 2012C001 REPLACE COAL					514,221	514,221		
27525030	BRIDGER 2019C032 BLANKET - PUM					508,531	508,531		
27531189	BRIDGER 2019C012 U3 SCRUBBER D			507,461		505.070	507,461		
27483924 27401266	BRIDGER 2017C068 SCRAPER REBUI BRIDGER 2014C006 U1 STEAM COOL	496,559				505,273	505,273 496,559		
27523303	BRIDGER 2019C001 U3 STACK LINI	450,555		495,665			495,665		
27463766	BRIDGER 2016C014 U4 REPLACE CH				474,295		474,295		
27350332	BRIDGER 2011C200 CCB JB FGD PO					474,055	474,055		
27389258 27473624	BRIDGER 2013C022 777 FRAME UP BRIDGER 2017C001 U2 PRECIPITAT		463,050			469,605	469,605 463,050		
27473024	BRIDGER 2017C001 02 FRECIFITAT		403,030			460,509	460,509		
27467817	BRIDGER 2016C093 SPARE START U					460,501	460,501		
27263222	BRIDGER 2007C209 U4 SO2 EMIS C				455,923		455,923		
27376631 27525026	BRIDGER 2012C008 WATER WAGON R BRIDGER 2019C026 U3 DCS HARDWA			449,130		450,770	450,770 449,130		
27455282	BRIDGER 2016C003 COMPRESSED AI			445,130		445,031	445,031		
27423701	BRIDGER 2014C061 U3 STEAM COOL			441,219		,	441,219		
27364631	BRIDGER 2012C018 U4 WATERWALL				436,128		436,128		
27380761 27499332	BRIDGER 2012C059 777 FRAME-UP BRIDGER 2017C123 TREATED WATER					426,649 426,010	426,649 426,010		
27539563	BRIDGER 2017C123 TREATED WATER BRIDGER 2019C092 REBUILD 01 CE					420,010	421,355		
27371139	BRIDGER 2012C032 777, FRAME-UP					408,425	408,425		
27445604	JOOA BRIDGER 345KV SUBSTATION					407,918	407,918		
27437115 27360949	BRIDGER 2015C072 CCR BA HANDLI BRIDGER 2011C056 RAD STACKER C					398,717 395,068	398,717 395.068		
27445705	BRIDGER 2011C056 RAD STACKER C BRIDGER 2015C016 REBUILD 777 A					395,068	395,068		
27463776	BRIDGER 2016C078 CCR FLYASH CO					390,696	390,696		
27463774	BRIDGER 2016C047 REBUILD 777 A					388,886	388,886	·	
27378446	BRIDGER 2012C082 U2 STEAM COOL		383,686		382,940		383,686		
27453586 27453580	BRIDGER 2016C011U4DAMPER U4 MA BRIDGER 2016C020LCCTRX REFURBI				382,940	372,194	382,940 372,194		
27501242	BRIDGER 2018C003 U1 DCS HARDWA	369,504				3,2,134	369,504		
27475625	BRIDGER 2017C003 U2 DCS HMI &		356,900				356,900		
27385483	BRIDGER 2013C026 COALYARD PLC/			252.000		356,102	356,102		
27527154 27493742	BRIDGER 2019/C/014 U3 STACK BR BRIDGER 2017C050 REBUILD 777 A			353,988		351,141	353,988 351,141		
27453572	BRIDGER 2016/C/002 U4 PRECIP E				348,882	331,141	348,882		
27525027	BRIDGER 2019C027 U0 DCS HARDWA				.,	346,372	346,372		
27459801	BRIDGER 2016C027 REBUILD FRAME					344,075	344,075		
27513381 27521484	BRIDGER 2018C084 REBUILD D-10 BRIDGER 2019C013 U3 PRECIPITAT			342,583		342,794	342,794 342,583		
27521484	BRIDGER 2019C013 U3 PRECIPITAT			342,583			342,583		
27477405	BRIDGER 2017C002 U2 PRECIP EPI		337,226	222,230			337,226		
27405731	BRIDGER 2014C034 REBUILD 777 A					333,467	333,467		
27451387	BRIDGER 2016C004 U4 STEAM-COOL BRIDGER 2013C019 US STACK BREE		329,316		332,879		332,879		
27388383	BRIDGER 2013C019 US STACK BREE		329,316				329,316		

Worker W	Project		U1	U2	U3	U4		Total	Purpose	Project Description/Justification
	27376630					-	328,760			
STORE MICHAEL STORES AND			323,787							
	27429046				322,875					
Property										
Month Mont		BRIDGER 2017CU/8 KLBU DITCH #6								
March Marc			304 005				311,351			
			304,985				303.822			
Proceedings Proceedings Process Proces										
				296.458			237,330			
### Billings desicolard (marks 7) P. 100 P.				_50,450		295.226				
Property										
	27449255									
Miles Mile	27497082	BRIDGER 2017C084 COMPRESSED AI					288,056			
Miles Mile	27435423	BRIDGER 2015C044 REBUILD FRAME					287,921			
					287,809			287,809		
			286,651							
		BRIDGER 2018C124 U3 REPLACE 33			286,110					
						285,341				
279.000 MINOCE AD ADDRESSAN DEFENDAT 279.000 779.000										
27-2005					270 45-		280,263			
274-280 177-28				270 422	278,492					
\$72,000 \$80,000 \$10,		BRIDGER 2016C010 L/A DCC LIAN R		278,123		275.042				
27-28-25 SROOMS SOUTH OF DEFENCE 1. 27-24-80						2/5,843	272 200			
29/2015			271 405				272,290			
298.100 298.										
27-2029 BROOK 2015COS UNIVENUE 25-205			2/1,302				268.320			
					267.926		200,520			
27,000 20,000 2										
2297086 800662 000600 1 MPT TEP 200522	27463787	BRIDGER 2016C080 U2 CABR INJEC		264,955	,					
24,158		BRIDGER 2018C013 U1 BFPT TRIP	264,523	. ,						
	27430996						262,136	262,136		
274.0167 SHOOLE 2016 CAT STOCK 10	27501245	BRIDGER 2018C014 U1 REPLACE FL	261,897			-		261,897		
27383789 BROGER 2015COOR BANKET FLAMPS 2745050 BROGER 2015COOR BANKET FLAMPS 2745050 BROGER 2015COOR BLOKE CHAMPAN 27525750 BROGER 2015COOR B		BRIDGER 2016C023 U4 SCRUBBER D		-		261,661				
27,9896	27461897		259,012							
279,005 MIRICAR 2015.00.04 U.2 REPLACE 82 254,147 253,005										
2739951 BROOKE 2010/COS USE CHAROYA 2749595 BROOKE 2010/COS USE CHAROYA 2749595 BROOKE 2010/COS USE CHAROYA 2749596 BROOKE 2010/COS USE CHAROYA 2749596 BROOKE 2010/COS USE CHAROYA 2749597 BROOKE 2010/COS USE CHAROYA 2749597 BROOKE 2010/COS USE CHAROYA 2749598 BROOKE 2010/COS USE CHAROYA 2749598 BROOKE 2010/COS USE CHAROYA 2749599 BROOKE 2010/COS USE CHAROYA 274959 BROOKE 201				20			254,805			
28,679				254,147	252.055					
279.9799 RRDGER 2015/CSUS HARMET - MOT 23.8551 238,951 238					253,050	240 670				
228,9078 279,9795 279						248,679	2/2 515			
278.975 SRIDGER 2017/COUR PERPACE R 238.951 228.851 228.851 277.978182						230 07/	243,313			
233,738		BRIDGER 2019C075 U3 IPA SCREEN			238 851	233,074				
2741388				233.738	230,031					
2279393 BRIDGER 2017/COM SERVILLO FRAME 2279392 BRIDGER 2017/COM SERVILLO S	27411884			_55,,56			233.714			
231,990 231,										
7245175 BROGR 2013COS IN INTALE P 231,229 231,229 231,229 27257615 BROGR 2013COS IN INTALE P 223,626 229,954 2725100 BROGR 2013COS IN PRICUPAT 228,669 229,954 229,954 229,954 229,955 229,954 229,955 229,954 229,955 229,954 229,955 229,954 229,955 229,954 229,955 229,954 229,955 229,954 229,955 229,955 229,954 229,955				231,990				231,990		
723F31515 8NDGER 2012C038 UA HNTAIL EP 72511006 8NDGER 2012C038 UA PRECIPITAT 725103608 BNDGER 2012C038 UL PRECIPITAT 725708558 JOHN ASSEPHACE POLIVE 7250F3608 BNDGER 2012C038 UZ REPLACE TU 7250F3608 BNDGER 2012C038 UZ REPLACE TU 7250F3608 BNDGER 2011C032 UL TRANSFORME 7250F360 BNDGER 2011C032 UR PLACE TR 7250F3750 BNDGER 2011C0							231,259	231,259		
PROBLEM PROB	27367615	BRIDGER 2012C038 U4 INSTALL EP				231,222		231,222		
2739058 BRIGGER 2015C0S UJ PRECIPITAT 228,469 228,466 228,466 228,466 27481544 BRIGGER 2015C0S UJ REPLACE TU 223,822 2 22,473 221,473 3	27511206	BRIDGER 2018C042 REPLACE PULVE				-	229,954			
27481544 SRIDGER 2017C025 BLANKET NIL 223,822 22		BRIDGER 2018C008 U1 PRECIPITAT	228,469							
27435420 BRIDGER 2015C025 BLANKET - MIL 21,802 21,473 221,473 221,473 22753568 BRIDGER 2015C022 UI FRANSFORME 219,802 217,310 215,807							228,406			
219,802 219,				223,822						
2759088 BRIDGER 2015CO12 UI SCRUBBER D 217,310							221,473			
215,897 215,897 215,011 215,			20			219,802				
21740122 BRIDGER 2015C104 UJ REPINE ST 214,500 215,011 2										
27441939 BRIDGER 2015COAL U3 REPLACE FL 214,360 214,360 212,430 2212,543 22			215,897			245.047				
27429099 BRIDGER 2015CO04 COALYARD PLC/ 27463778 BRIDGER 2015CO04 U2 NUVA FEEDE 210,918 212,543 212,54					244.200	215,011				
2745778 BRIDGER 2015C084 UA REPLACE FL 210,518 212,543 212,543 212,543 27477363 BRIDGER 2014C052 UJA REPLACE FS 201,318 210,918 210,918 210,918 210,918 210,918 27423703 BRIDGER 2014C052 UJA REPLACE FS 201,331 201,372 2					214,360		212 670			
27473763 BRIDGER 2017C014 U2 NUVA FEEDE 210,918 201,388 210,918 201,372 201,372 201,372 2749703 BRIDGER 2020C072 REBUILD 777 A 201,331 201,372 201,372 27497587 BRIDGER 2016C016 U1 REPLACE DR 201,331 200,389 201,381 200,389 201,381 200,389 201,381 200,389 201,381 200,389 201,381 200,389 201,381 200,489 201,381 200,489 201,381 200,489 201,381 200,489 201,381 200,489 201,381 200,489 201,381 201,381 200,489 201,381						212 5/2	213,079			
27423703 BRIDGER 2014C062 U3 REPLACE 35 201,388 201,388 201,388 201,372 201,372 201,372 201,372 201,372 201,372 201,373 201,373 201,373 201,373 201,373 201,373 201,373 201,373 201,373 201,373 201,373 201,373 201,372				210 010		212,343				
27555273 BRIDGER 2012C0172 REBUILD 777 A 201,372 201,372 201,372 201,372 201,372 201,372 201,372 201,372 201,372 201,373 201,3	27423703			210,518	201 389					
27407587 BRIDGER 2014C016 U1 REPLACE DR 201,331					231,300		201.372			
27501246 BRIDGER 2015C011 U3 FRECRITA 200,489 200,489 200,489 27483416 BRIDGER 2015C011 U3 FRECRITA 199,610 199,511			201.331				202,572			
27483466 BRIDGER 2015C011 U3 PRECIPITA 199,610 199,610 199,610 199,610 199,610 199,610 199,611 1										
27483917 BRIDGER 2017C064 BLANKET - REP 199,581			10,100		199,610					
27531192 SRIDGER 2019C044 U3 APH SEAL R 199,193							199,581			
27439124 BRIDGER 2015COS8 U3 TURBINE 7T 198,067 198,067 27362901 BRIDGER 2015COS8 U3 TURBINE 7T 198,000 198,000 27465336 BRIDGER 2016COS2 SPARE 1- BUC 197,610 197,610 27521500 BRIDGER 2016COT3 U3 SCR PLATFO 197,549 197,549 27470121 BRIDGER 2016COT3 U3 TURBINE 8T 196,201 196,201 27481646 BRIDGER 2017CO38 BLANKET - MOT 195,691 195,691	27531192	BRIDGER 2019C044 U3 APH SEAL R								
27362901 BRIDGER 2012C030 BLANKET - PUM 198,000 198,000	27439124	BRIDGER 2015C058 U3 TURBINE 7T								
27521500 BRIDGER 2018C073 UB SCR PLATFO 197,549 197,549 27470121 BRIDGER 2016C105 UB TURBINE BT 196,201 196,201 27481646 BRIDGER 2017C038 BLANKET - MOT 195,691 195,691	27362901	BRIDGER 2012C030 BLANKET - PUM							·	
27470121 BRIDGER 2016C105 U4 TURBINE 8T 196,201 196,201 196,201 27481646 BRIDGER 2017C038 BLANKET - MOT 195,691 195,691						-	197,610			
27481646 BRIDGER 2017C038 BLANKET - MOT 195,691 195,691										
						196,201				
27495320 BRIDGER 2017C107 REPLACE 05 CH 194,962 194,962										
	27495320	BRIDGER 2017C107 REPLACE 05 CH					194,962	194,962		

Project	Descr	U1	U2	U3	U4	BC	Total	Purpose	Project Description/Justification
27542998	BRIDGER 2020C003 BLANKET - MOT					194,594	194,594		
27356950	BRIDGER 2012C004 U0 DEC HARDWA					192,326	192,326		
27479354	BRIDGER 2017C015 U2 STACK LINI		192,092				192,092		
27401262	BRIDGER 2013C014 BLANKET-MOTOR		400 200			190,827	190,827		
27388381 27551352	BRIDGER 2013C015 U2 REPLACE TU		190,300			100 416	190,300		
27435418	BRIDGER 2020C064 BLANKET - MIL BRIDGER 2015C024 U3 REPLACE CW			188,219		189,416	189,416 188,219		
27409851	BRIDGER 2014C005 U1 STACK BREE	187,323		100,219			187,323		
27487465	BRIDGER 2017C023 WASTE LIQUOR	107,323				186,927	186.927		
27403807	BRIDGER 2014C025 WASTE EIGOON BRIDGER 2014C025 U1 REPLACE NU	185,218				100,327	185,218		
27366417	BRIDGER 2012C012 U4 REPLACE CW	103,210			183,706		183,706		
27493690	BRIDGER 2017C109 U1 BOILER OPT	183,391			105,700		183,391		
27383745	BRIDGER 2013C025 AGC	200,002				182,298	182,298		
27495130	BRIDGER 2018C016 U3 BOILER OPT			181,950		,	181,950		
27505300	BRIDGER 2018C077 11 BOILER FEE			,		181,482	181,482		
27471817	BRIDGER 2016C112 U0 WASTE LIQU					180,234	180,234		
27441704	BRIDGER 2015C009 U3 SDCC LOWER			180,165			180,165		
27479357	BRIDGER 2017C048 WATER BALANCE					179,803	179,803		
27366421	BRIDGER 2012C035 U2 ADDITIONAL		179,779				179,779		
27459802	BRIDGER 2016C038 U4 SDCC LOWER				178,475		178,475		
27530128	BRIDGER 2019C064 U3 WATERWALL			178,228			178,228		
27401259	BRIDGER 2013C008 REPLACE PULVE					177,245	177,245		
27501252	BRIDGER 2018C032 U1 NUVA FEEDE	176,191					176,191		
27457814	BRIDGER 2016C051 REPLACE PULVE					174,661	174,661		
27569752	BRIDGER 2020C095 REPLACE 35 TO					173,425	173,425		
27461812	BRIDGER 2016C030 U4 STACK LINE				172,268		172,268		
27445777	BRIDGER 2015C043 BLANKET - MOT					168,657	168,657		
27411880	BRIDGER 2014C004 U1 PREDIPITAT	167,260					167,260		
27405732	BRIDGER 2014C038 REPLACE 01 EF					167,176	167,176		
27527234	BRIDGER 2019C021 U3 LPA SCR CO			166,757			166,757		
27364628	BRIDGER 2012C006 UPS UPGRADES					165,305	165,305		
27364625	BRIDGER 2012C002 U4 HEAVY WALL				164,785		164,785		
27523295	BRIDGER 2018C049 BLANKET - MIL					164,447	164,447		
27470123	BRIDGER 2016C107 U4 TURBINE ST				162,118		162,118		
27531265	BRIDGER 2019C074 U3 CATALYST A			161,036			161,036		
27495321	BRIDGER 2017C112 01 SECONDARY					158,843	158,843		
27513385	BRIDGER 2018C095 U3 REPLACE 72	450 400		158,802			158,802		
27409849	BRIDGER 2014C002 U1 SCRUBBER D	158,480		157,369			158,480		
27437077	BRIDGER 2015C017 U3 MERCURY DE		455.277	157,369			157,369		
27356155	JIM BRIDGER UNIT#2 - REDUNDANT	454000	155,377				155,377		
27509226 27503130	BRIDGER 2018C090 U1 ID FAN DIS BRIDGER 2018C043 U1 SH DIVISIO	154,929 151,907					154,929 151,907		
27481645	BRIDGER 2017C027 U2 HEAVY WALL	151,907	151,733				151,733		
27477409	BRIDGER 2017C012 U2 NUVA FEEDE		151,733				151,755		
27529757	BRIDGER 2019C067 U3 PA DUCT IN		131,373	151,016			151,016		
27521499	BRIDGER 2018C072 U3 SCR PLATFO			150,040			150,040		
27445706	BRIDGER 2015C033 U3 STACK LIN			149,464			149,464		
27366430	BRIDGER 2012C052 U4 REPLACE TU			145,404	149,215		149,215		
27366435	BRIDGER 2012C064 U4 ABSORBER L				148,764		148,764		
27541810	BRIDGER 2019C085 BLANKET - COA					148,127	148,127		
27435421	BRIDGER 2015C032 REBUILD WATER					147,408	147,408		
27461890	BRIDGER 2016C070 U4 GSU HEAT E		İ		146,433		146,433		
27405727	BRIDGER 2014C012 U1 REPLACE CW	143,750	İ				143,750		
27503072	BRIDGER 2018C022 U1 REPLACE EC	143,114					143,114		
27537480	BRIDGER 2019/C/055 REPLACE 03					141,656	141,656		
27383738	BRIDGER 2013C003 US SDCC INSTA					139,658	139,658		
27366425	BRIDGER 2012C047 U4 ADDITIONAL				139,440		139,440		
27385448	BRIDGER 2013C013 U1 BRIDGE CRA	139,130					139,130		
27505216	BRIDGER 2018C026 BLANKET - MOT					138,839	138,839		
27385442	BRIDGER 2013C007 BLANKET - MIL					137,513	137,513		
27491662	BRIDGER 2017C097 U1 PRECIP ROO	137,228					137,228		
27523296	BRIDGER 2018C070 BLANKET - UND					136,862	136,862		
27499200	BRIDGER 2017C108 U1 EHC PUMPS	135,614					135,614		
27523304	BRIDGER 2019C003 U3 NUVA FEEDE			134,455			134,455		
27531221	BRIDGER 2019C047 U3 ID FAN DIS			133,951			133,951		
27457813	BRIDGER 2016C043 U4 REPLACE NU				133,772		133,772		
27435430	BRIDGER 2015C061 U3 REPLACE GS			133,685			133,685		
27385447	BRIDGER 2013C002 U2 REPLACE CW		132,150				132,150		
27499198	BRIDGER 2017C101 A & B RO PUMP	45				130,897	130,897		
27501257	BRIDGER 2018C061 U1 MERCURY DE	130,853					130,853		
27501255	BRIDGER 2018C059 U1 PA DUCT IN	130,577				420.25-	130,577		
27509227	BRIDGER 2018C092 BCP MOTOR REW			455.55		130,239	130,239		
27433315	BRIDGER 2015C039 U3 BFP TURBIN	45		129,480			129,480		
27501247	BRIDGER 2018C021 U1 ACOUSTIC L	129,279			420.55		129,279		
27461895	BRIDGER 2016C077 U4 SDCC WEAR			120 170	128,564		128,564		
27443622	BRIDGER 2015C065 U3 HP & LP SH	420.425		128,476			128,476		
27366423	BRIDGER 2012C045 U1 ADDITIONAL	128,129		120.012			128,129		
27527159 27455355	BRIDGER 2019C025 U3 REPLACE NU BRIDGER 2016C026 BLANKET REPLA			128,010		127,932	128,010 127.932		
27455355	BRIDGER 2017C032 U2 MERCURY DE		127,283	-		127,932	127,932		
4/4//304	DIVIDUEN 2017C032 UZ WERCURT DE		121,263				127,283		I .

Commonweal Commonwea										
	Project			U2	U3	U4	ВС	Total	Purpose	Project Description/Justification
March Marc	27483923		126,986							
Manual Property Manual Pro					126,398				·	
							126,217			
Proceedings				123,819						
					61,419	61,419	40			
					120 15-		121,147			
1,000 1,00				110.000	120,153					
Proceedings Process				119,892			110 622			
								,		
						119 551	119,570			
						115,551	119.088			
Month Mont				118.052			113,000			
				110,052			117.853	117,853		
1922 1922										
	27513380	BRIDGER 2018C076 BLANKET - REP					116,986	116,986		
	27376632					114,209		114,209		
MINISTRATING AND AND WINTER	27455313	BRIDGER 2016C045 U4 SCWS ION E				113,919		113,919		
MISSES M	27541812						113,088	113,088		
MINISTER MINISTER					113,020					
						112,277				
Manager of State Section Section (1997) 1998										
\$2,000 \$										
1907-1907 1906-1907 1907					100 707		109,842			
					109,797		100 274			
			107 889				105,574			
Mode Mode			207,003				106.723			
22-19596 BROOKE 20ACKSES LITURIENCE (R. 196-47) 196-47 196-4	27411889		106,523							
19.686 1	27415956	BRIDGER 2014C058 U1 TURBINE CR	106,447							
19.686 1	27555269	BRIDGER 2020C039 BCP MOTOR REW					106,278	106,278		
	27465188	BRIDGER 2016C024 U4 PRECIPITA				105,861		105,861		
272727565 BIOGER 2005/05/05/13 ACQUISTIC 10,505 10,005 1	27467825			-			104,841			
	27523305								·	
	27527166				104,055					
1972/1976	27524351			103,512			46			
1972-1975 SINCER 2015CLS MERCHATOR U 10,481 10,481 10,481 10,481 10,481 10,282 10,283 10,				102.05			103,161			
27275275 MRDGER 2015COFF JULNET - SPP 101,407 101,				102,060		101 401				
19,125						101,481	101 407			
17756153 SRIGGER 2000/COSP LOW WATE LOUD 10,0,779 100,0779 100,0779 100,0779 170,0779			101 122				101,407			
27213185 8RDGER 2015COB LANKET LEGRA 9		BRIDGER 2020C090 UN WASTE LIGHT	101,123				100 972			
27541805 BRIDGER 70150080 BANKET UPRIGA						100.814	130,573			
17930589 BBDGER 2020058 PLARA ECIAGNE 99,977 99,977 99,977 99,977 99,977 99,975 99,9	27541805					_50,014	100.152			
2736565 8BROER 2012006 VER ACC LOADE 99,751 2739516 BROER 2012006 VER ACC LOADE 99,751 2739517 SBROER 2012006 VER ACC LOADE 99,751 2739518 BROER 2012006 VER ACC LOADE 99,751 2739518 BROER 2012006 VER ACC LOADE 99,751 2739518 BROER 2012006 VER ACC LOADE 99,752 8ROER 2012006 VER ACC LOADE 99,752 8ROER 2012006 VER ACC LOADE 99,753 8ROER 2012006 VER ACC LOADE 99,752 8ROER 2012006 VER ACC LOADE 99,752 99,752 99,76	27503089		99,977				,			
1749905 BRIOGR 2017COS U. PA DUCT IN 99,751 99,751 99,751 99,757 7747999 BRIOGR 2017COS U. PA DUCT IN 99,750 98,595 98,595 774790592 880GCR 2017COS U. PRICED OUT 99,859 98,412 97,672 9	27566765						99,955			
Page Page				99,751						
MIDISTR 2019/COMP MIDI	27479290	BRIDGER 2016C066 U2 PA DUCT IN								
## SRIGGER 2012/CD UN TURNED PROTE 98,412 98,412 ## SRIGGER 2012/CD UN CONTINUED PROCESSES 96,757 ## SRIGGER 2012/CD UN ECONOMIZER 96,921 96,921 ## SRIGGER 2012/CD UN ECONOMIZER 96,921 96,925 ## SRIGGER 2012/CD UN ECONOMIZER 96,935 96,039 ## SRIGGER 2012/CD UN ECONOMIZER 96,935 96,039 ## SRIGGER 2012/CD UN ASSET PAC SPONSORED. JRR 94,925 94,925 ## SRIGGER 2012/CD UN ASSET PAC SPONSORED. JRR 94,925 94,925 ## SRIGGER 2012/CD UN ECONOMIZER 94,925 94,666 ## SRIGGER 2012/CD UN ECONOMIZER 94,666 94,666 ## SRIGGER 2012/CD UN ECONOMIZER 94,654 94,658 ## SRIGGER 2012/CD UN ECONOMIZER 94,654 94,658 ## SRIGGER 2012/CD UN ECONOMIZER 94,654 94,658 ## SRIGGER 2012/CD UN ECONOMIZER 94,654 94,668 ## SRIGGER 2012/CD UN ECONOMIZER 94,654 94,658 ##	27531218	BRIDGER 2019C009 U3 PRECIP OUT			98,595					
Page Page	27360952	BRIDGER 2012C025 U4 TURB PROTE				98,412				
27257518 BRIDGER 2013C049 UA ECONOMIZER 96,375 96,375 96,275 97,2757520 BRIDGER 2013C053 BLANKET - LE 9 96,029 95,571 95,571 95,571 95,571 97,2757520 BRIDGER 2013C056 UD MERCURY DE 94,655 94,655 94,656 94,							97,672			
SRIDGER 2018C033 BLANKET - ELE					96,921					
27480988 JOINT ASSET-PAC SPONSORED. JBR 94,925 94						96,375				
SRIDGER 2019COAS UI SECONOMIZER 94,925 94,925 94,925										
SRIDGER 2019C066 UD MERCURY DE 94,666 94,6					040		95,571			
27591256 BRIDGER 2018COG9 UJ FLAME SCAN 94,658 94,658 94,658 27445783 BRIDGER 2015COG9 UJ PECLIPITAT 94,658 94,658 94,658 27445783 BRIDGER 2015COG9 UJ PECLIPITAT 94,658 94,658 27445783 BRIDGER 2015COG9 UJ PECLIPITAT 94,658 94,658 27445783 BRIDGER 2015COG9 UJ PENDANT PL 94,078 93,546 93,546 27445783 BRIDGER 2015COG9 UJ TURBINE PA 94,078 93,546 93,546 27471811 BRIDGER 2015COG9 UJ TURBINE PA 94,078 93,143 93,143 27471811 BRIDGER 2015COG9 UJ TURBINE PA 92,912 92,912 27442615 BRIDGER 2015COG1 UJ STACK BREE 92,97 92,99 27442615 BRIDGER 2015COG1 UJ STACK BREE 92,337 92,490 92,490 274471815 BRIDGER 2015COG1 UJ STACK BREE 92,337 92,490 92,397 27451819 BRIDGER 2015COG3 UJ UJ TURBINE PA 92,391 92,299 27445191 BRIDGER 2015COG3 UJ UJ FLOOD SP 92,219 92,219 27445191 BRIDGER 2015COG3 UJ PH DOOD SP 92,219 92,219 274597154 BRIDGER 2015COG3 EPLACE F 99,0617 90,6					94,925		04.555			
27485702 BRIDGER 2017C020 UZ PRECIPITAT 94,654 94,078 94,078 27485793 BRIDGER 2015C096 UZ PREDANT PL 94,078 94,078 94,078 27485795 BRIDGER TYS/5017/C/\$64 NERC P 93,546 93			04.650				94,666			
SPINGER 2015C096 LU PENDANT PL 94,078 94,078 94,078 94,078 94,078 94,078 94,078 94,078 94,078 94,078 93,482 93,482 93,482 93,482 93,481 93,4			94,658	04.654						
27489499 JOHN TASSET-PAC SPONSORED: JIM 93,546 93,546 93,546 93,546 93,546 93,546 93,546 93,546 93,482 93				94,654	04.070					
2755955 BRIDGER 2016C109 U4 TURBINE PA 93,482 93,482 93,482 93,482 72751253 BRIDGER 2016C109 U4 TURBINE PA 92,912 92,912 92,912 92,490					J4,U/8		02 546			
27471811 BRIDGER 2016C109 UA TURBINE PA 93,143 93,143 27471815 BRIDGER 2018C035 UI SDC REPLA 92,912 92,917 27471815 BRIDGER 2018C017 UI STACK BREE 92,97 92,490 27503069 BRIDGER 2018C017 UI STACK BREE 92,337 92,490 27503069 BRIDGER 2018C017 UI STACK BREE 92,337 92,397 27465192 BRIDGER 2016C036 UA IP HODD SP 92,337 92,219 27497154 BRIDGER 2016C036 UA IP HODD SP 92,397 92,219 27497154 BRIDGER 2016C036 UA IP HODD SP 92,397 90,617 27553546 BRIDGER 2016C038 UA IP HODD SP 90,617 90,617 27553546 BRIDGER 2017C039 REPIACE F 90,613 90,613 27479362 BRIDGER 2017C039 BRANKET - SHO 90,007 90,007 27553547 BRIDGER 2017C039 BRANKET - SHO 90,007 90,007 27553547 BRIDGER 2017C039 BRANKET - SHO 90,007 90,007 27553546 BRIDGER 2017C039 BRANKET - SHO 90,007 90,007 27553547 BRIDGER 2017C039 BRANKET - SHO 90,007 90,007 27553546 BRIDGER 2017C039 BRANKET - SHO 90,007 90,007 27553547 BRIDGER 2017C039 BRANKET - SHO 90,007 90,007 27553547 BRIDGER 2017C039 BRANKET - SHO 90,007 90,007 27553547 90,007 90,007 90,007 27553547 90,007 90,007 90,007 90,007 27553547 90,007 90,007 90,007 90,007 27553547 90,007 90,007 90,007 90,007 27553547 90,007 90,007 90,007 90,007 90,007 27553547 90,007		BRIDGER TSYS/2017/C/864 NERC P								
27591233 BRIDGER 2018C035 U1 SDCC REPLA 92,912 92,497 92,493 92,490 92,4		BRIDGER 2016C109 U4 TURRINF PA				93.143	33,402			
27443615 BRIDGER 2015C012 U3 STACK BREE 92,497 92,497 92,497	27501253		92,912			33,143				
27471815 BRIDGER 2016C111 UA MAIN TURB! 92,337 92,3			,-12		92.497					
27593069 BRIDGER 2018C017 U1 STACK BREE 92,337 92,3					,	92,490				
27465192 BRIDGER 2016C036 U4 LP HOOD SP 92,219 92,219 92,219 27497154 BRIDGER 2017C118 U0 COAL SILO' 90,617 90,617 90,617 90,613			92,337							
27497154 BRIDGER 2017C118 UD COAL SILO' 90,617 90,617 90,617 727853727 JIM BRIDGER 2011C053 REPLACE F 90,613 90,613 727559546 BRIDGER 2010C053 UD 01-ACID TA 90,239 90,239 727479362 BRIDGER 2017C059 BLANKET - SHO 90,010 90,107 90,107 727515347 BRIDGER 2018C085 DUST COLLECTO 90,037 90,037 90,037 90,037 90,037	27465192	BRIDGER 2016C036 U4 LP HOOD SP				92,219				
SRIDGER 2020C085 U0 01-ACID TA 90,239 90,2	27497154						90,617			
27479362 BRIDGER 2017C059 BLANKET - SHO 90,107 90,107 27515347 BRIDGER 2018C085 DUST COLLECTO 90,070 90,070 27489699 BRIDGER 2017C088 UN-INV TRUCK 90,037 90,037	27353727	JIM BRIDGER 2011C053 REPLACE F						90,613		
27515347 BRIDGER 2018C085 DUST COLLECTO 90,070 90,070 27489699 BRIDGER 2017C088 UO-NEW TRUCK 90,037 90,037										
27489699 BRIDGER 2017C088 U0-NEW TRUCK 90,037 90,037										
	27515347									
27531241 BRIDGER 2019C079 U4 ABS 42 OUT 89,891 89,891							90,037			
	27531241	BRIDGER 2019C079 U4 ABS 42 OUT				89,891		89,891		

Project	Descr	U1	U2	U3	U4	BC	Total	Purpose	Project Description/Justification
27517680	BRIDGER 2018C117 INSTALL EFFLU		88,837			89,332	89,332		
27388384 27523307	BRIDGER 2013C023 U2 PRECIPITAT BRIDGER 2019C035 U3 FLAME SCAN		88,837	87,305			88,837 87,305		
27475628	BRIDGER 2017C017 U2 REPLACE SC		87,134	87,305			87,305 87,134		
27519563	BRIDGER 2017C017 02 REPLACE 3C BRIDGER 2018C106 U2 BURNER ACC		86,916				86.916		
27443613	BRIDGER 2015C010 U3 SCRUBBER D		80,510	86,373			86,373		
27525033	BRIDGER 2019C048 REPLACE PULVE			80,373		86,254	86,254		
27430998	BRIDGER 2015C046 U3 SOOTBLOWER			85,563		00,254	85,563		
27519565	BRIDGER 2018C108 U4 BURNER ACC			00,000	85,126		85,126		
27367621	BRIDGER 2012C055 U4 BOILER DOO				85,107		85,107		
27467789	BRIDGER 2016C046 U4 SDCC REPL				84,703		84,703		
27477558	BRIDGER 2017C051 U2 SDCC REPLA		84,600				84,600		
27362904	BRIDGER 2012C040 BLANKET - MOT		,			84,126	84,126		
27355533	BRIDGER 2011C061 03 CENTRAL AI					84,048	84,048		
27439117	BRIDGER 2015C003 U3 SLMS HP UP			83,798			83,798		
27487477	BRIDGER 2017C072 BCP RECONDITI		83,285				83,285		
27353726	JIM BRIDGER 2011C048 JB BOILER					82,920	82,920		
27519564	BRIDGER 2018C107 U3 BURNER ACC			81,964			81,964		
27497088	BRIDGER 2017C093 REPLACE ROOFI					80,667	80,667		
27463783	BRIDGER 2016C087 U2 REPLACE 72		80,641				80,641		
27451486	BRIDGER 2015C103 O1B CONVEYOR					80,603	80,603		
27441701	BRIDGER 2015C083 REPLACE LARGE					80,587	80,587		
27461817	BRIDGER 2016C073 U4 VERTICAL C				80,134		80,134		
27475620	BRIDGER 2016C060 U1 SDCC REPLA	79,758					79,758		
27505231	BRIDGER 2018C047 U1 REPLACE 11	79,475					79,475		
27479361	BRIDGER 2017C019 U2 REPLACE PR		79,123				79,123		
27533259	BRIDGER 2019C034 REPLACE ROOFI					78,774	78,774		
27471810	BRIDGER 2016C086 ADMIN OFFICE					78,637	78,637		
27521501	BRIDGER 2018C123 ASPHALT WORK					78,548	78,548		
27531197	BRIDGER 2019C037 U3 INSTALL OR			78,423			78,423		
27430997	BRIDGER 2015C029 U3 APH SECTOR			78,340			78,340		
27537482	BRIDGER 2019/C/080 BCP MOTOR R			78,263			78,263		
27491655	BRIDGER 2017C087 WATER TREATME					78,090	78,090		
27374765	BRIDGER 2012C072 PURCHASE SURP					77,571	77,571		
27511213	BRIDGER 2018C102 U2 SDCC REPLA		77,394	75.405			77,394		
27531219	BRIDGER 2019C020 U3 CIRC WATER			75,196			75,196		
27529755	BRIDGER 2019C059 U3 COAL PIPE		72.004	74,965			74,965		
27483892 27367624	BRIDGER 2017C018 U2 PRECIP DAM BRIDGER 2012C060 U1 REPLACE TU	73,439	73,894				73,894 73,439		
		73,439				73,281			
27501239	BRIDGER 2017C057 REPLACE PULVE						73,281		
27519556 27467831	BRIDGER 2017C122 PURCHASE PORT BRIDGER 2016C102 REDUNDANT CSF					73,148 72,957	73,148 72,957		
27527161	BRIDGER 2019C039 BLANKET - ELE					72,885	72,885		
27501251	BRIDGER 2018C027 U1 PRECIP TR	72,720				72,003	72,720		
27501231	BRIDGER 2018C006 U1 REPLACE PR	72,264					72,264		
27388378	BRIDGER 2013C001 U2 REPLACE MA	72,204	72,218				72,218		
27433303	BRIDGER 2015C035 U3 REPLACE SC		72,210	71,641			71,641		
27470110	BRIDGER 2016C103 U4 TURBINE ST			,,	71,442		71,442		
27398632	BRIDGER 2013C035 AT TEMPERATUR				, i	71,149	71,149		
27503070	BRIDGER 2018C018 U1 PRECIP DAM	71,144					71,144		
27539561	BRIDGER 2019C090 REPLACE DAMAG					70,726	70,726		
27511211	BRIDGER 2018C098 U4 SDCC REPLA				70,493		70,493		
27451383	BRIDGER 2015C028 BCP MOTOR REW			70,371			70,371		
27525007	BRIDGER 2019C008 U3 PRECIP DAM			70,342			70,342		
27443621	BRIDGER 2015C013 U3 SDCC EXTER			69,971			69,971		
27479363	BRIDGER 2017C060 U2 SDCC REPLA		69,822				69,822		
27463781	BRIDGER 2016C071 REPLACE GREEN					69,524	69,524		
27403805	BRIDGER 2014C013 U1 SOOTBLOWER	69,049					69,049		
27465198	BRIDGER 2016C075 U4 PA DUCT IN				68,823	_	68,823		
27553268	BRIDGER 2020C063 U0 CSF ACID T					68,673	68,673		
27475468	BRIDGER 2016C115 CAPITAL SPARE					68,430	68,430		
27459807	BRIDGER 2016C054 U2 SDCC REPLA		67,992		e		67,992		
27491661	BRIDGER 2017C095 U4 PRECIP ROO	67.007			67,842		67,842		
27398635	BRIDGER 2014C010 U1 SDCC INSTA	67,807				67,651	67,807 67,651		
27398631	BRIDGER 2013C032 WASTE LIQUOR								
27403810 27403808	BRIDGER 2014C031/22CWP REWIND		67 522			67,646	67,646 67,533		
27403808	BRIDGER 2014C027 U2 SDCC CHAIN BRIDGER 2020C047 U1 SDCC REPLA	67,013	67,533				67,013		
27523319	BRIDGER 2019C043 U3 REPLACE 31	07,013		66,912			66,912		
27523319	BRIDGER 2019C043 U3 REPLACE 31 BRIDGER 2019C088 FLOW MONITOR			00,912		66,432	66,432		
27555270	BRIDGER 2020C048 U4 SDCC REPL				66,171	00,432	66,171		
27463780	BRIDGER 2016C041 U4 TURBINE GE				66,020		66,020		
27415957	BRIDGER TROC2013C002 MICROWAVE				50,020	65,840	65,840		
27551350	BRIDGER 2020C061 U2 SDCC REPLA		65,119			03,040	65,119		
27545656	BRIDGER 2019C100 BLANKET - MIL		33,119			65,077	65,077		
27507399	BRIDGER 2019C100 BLANKET - MIL BRIDGER 2017C117 WAREHOUSE LOA					64,718	64,718		
27533257	BRIDGER 2019C031 U3 UPGRADE CO			64,640		04,710	64,640		
27547302	BRIDGER 2019C031 03 OFGRADE CO			34,040		64,535	64,535		
27483896	BRIDGER 2017C044 U2 UPGRADE CO		64,017			0-1,555	64,017		
27485777	BRIDGER 2012C015 DUMP TRUCK FO		3-1,017			63,807	63,807		
						-5,007	05,007		I

Project Descr	E D DE ET	U2	U3	U4	BC 63,401	Total 63,401	Purpose	Project Description/Justification
27422144 BRIDGER 2014C056 CAPITAL SPARE	E D DE ET							
27373109 BRIDGER 2012C054 U4 RELINE ECO 27355528 BRIDGER 2011C055 REPLACE CONN 27495319 BRIDGER 2011C0591 PLANT CONCRI 27413987 BRIDGER 2014C026 REPLACE 260V 27471318 BRIDGER 2016C113 U4 REAR WATT 27491660 BRIDGER 2017C094 U3 PRECIP ROC 27477141 BRIDGER 2017C091 U2 SOOTBLOW	DE ET				62.260			
27355528 BRIDGER 2011C055 REPLACE CONNE 27495319 BRIDGER 2017C091 PLANT CONCRI 27413987 BRIDGER 2014C026 REPLACE 260V 27471318 BRIDGER 2016C113 UA REAR WATE 27491660 BRIDGER 2017C094 U3 PRECIP ROC 274771411 BRIDGER 2017C091 U2 SOOTBLOW	DE ET				63,268	63,268		
27495319 BRIDGER 2017C091 PLANT CONCRI 27413987 BRIDGER 2014C026 REPLACE 260V 27471818 BRIDGER 2016C113 U4 REAR WATE 27491660 BRIDGER 2017C094 U3 PRECIP ROC 27477411 BRIDGER 2017C041 U2 SOOTBLOW	ET			62,242		62,242		
27413987 BRIDGER 2014C026 REPLACE 260V 27471818 BRIDGER 2016C113 UA REAR WATT 27491660 BRIDGER 2017C094 U3 PRECIP ROC 27477411 BRIDGER 2017C041 U2 SOOTBLOW	1				62,166	62,166		
27471818 BRIDGER 2016C113 U4 REAR WATE 27491660 BRIDGER 2017C094 U3 PRECIP ROC 27477411 BRIDGER 2017C041 U2 SOOTBLOW	rn.				61,840	61,840		
27491660 BRIDGER 2017C094 U3 PRECIP ROC 27477411 BRIDGER 2017C041 U2 SOOTBLOW					61,636	61,636		
27477411 BRIDGER 2017C041 U2 SOOTBLOW			54.450	61,499		61,499		
		61,316	61,468			61,468 61,316		
		61,316			61,087	61,087		
27503087 BRIDGER 2018C060 BLANKET UPGF 27459803 BRIDGER 2016C018 U4 SOOTBLOW				60,864	61,087	60,864		
27511212 BRIDGER 2018C099 U3 MILL DISCH	I I		60,836	00,004		60,836		
27527165 BRIDGER 2019C063 BLANKET - SMA			00,030		60,699	60,699		
27455309 BRIDGER 2016C028 U4 NETWORK				60,695	00,033	60,695		
27433301 BRIDGER 2015C005 REPLACE IT-38					60,590	60,590		
27557171 BRIDGER 2020C079 TREATED WAT					60,242	60,242		
27453577 BRIDGER 2016C017 WATERGIRL OV	VA				60,066	60,066		
27509242 BRIDGER 2018C097 32 APH TRUNN	NI .				59,901	59,901		
27465362 BRIDGER 2016C096 SURGE POND F					59,257	59,257		
27457803 BRIDGER 2016C021 U4 BFP SYSTEM				58,532		58,532		
27360953 BRIDGER 2011C062 777 ENGINE RE	E				58,478	58,478		
27389257 BRIDGER 2013C021 RELINE SOUTH					58,353	58,353		
27435422 BRIDGER 2015C037 U3 BFP SYSTEM			58,342			58,342		
27421236 BRIDGER 2014C039 U1 RECOAT CIF						58,000		
27507243 BRIDGER 2018C023 U1 UPGRADE C						57,370		
27398633 BRIDGER 2013C038 U1 SDCC CHAIR 27366429 BRIDGER 2012C051 U4 APH SECTO	N 57,366		+	50.752		57,366		
27366429 BRIDGER 2012C051 U4 APH SECTO 27541809 BRIDGER 2019C069 REPLACE LARG			+	56,753	56,510	56,753 56,510		
27481631 BRIDGER 2017C043 U2 FLAME SCA		55.981			50,510	55,981		
27366420 BRIDGER 2012C031U2 SDCC CHAIN		55,617				55,617		
27551351 BRIDGER 2020C062 U3 SDCC REPLA		33,017	55,484			55,484		
27525081 BRIDGER 2019C054 BLANKET UND	FR		33,101		55,253	55,253		
27467829 BRIDGER 2016C101 U4 ABSORBER				55,024	00,200	55,024		
27483701 BRIDGER 2017C007 U2 CIRC WATE		54,450				54,450		
27491659 BRIDGER 2017C089 U2 SCRUBBER		54,248				54,248		
27405729 BRIDGER 2014C021 U1 BFPT AC/D0	C 53,932					53,932		
27519304 BRIDGER 2018C103 REPLACE PLAN	IT				53,807	53,807		
27521502 BRIDGER 2018C126 U1 COOLING To	0 53,756					53,756		
27473621 BRIDGER 2016C097 REPLACE ROOF					53,710	53,710		
27459799 BRIDGER 2016C12 BLANKET-MILLS,					53,642	53,642		
27485916 BRIDGER 2017C080 U2 ID FAN OUT		53,521				53,521		
27483893 BRIDGER 2017C028 REPLACE PLAN		52.750			53,295	53,295		
27483920 BRIDGER 2017C071 U2 ECONOMIZ		52,750				52,750 52.387		
27499211 BRIDGER 2018C034 U1 BFPT EXHAI 27507245 BRIDGER 2018C039 U1 REPLACE EF						51,983		
27525025 BRIDGER 2019C023 REPLACE EX-21					51,959	51,959		
27362898 BRIDGER 2012C026 U1 SDCC REPLACE EX-21	A 51,926				31,535	51,926		
27505235 BRIDGER 2018C086 U3 SDCC REPLA			51,483			51,483		
27529752 BRIDGER 2019C052 BLANKET - PLA			51,103		51,382	51,382		
27410700 BRIDGER 2014C047 U1 BFP SYSTEM					02,002	51,199		
27367625 BRIDGER 2012C061 BREEZEWAY &					51,141	51,141		
27481643 BRIDGER 2017C008 U2 SDCC LINER	₹	50,935				50,935		
27533266 BRIDGER 2019C061 U3 REPLACE 26	6		50,796			50,796		
27505228 BRIDGER 2018C041 U1 CIRC WATE	R 50,789					50,789		
27453579 BRIDGER 2016C022 U4 REPLACE PR				50,577		50,577		
27477361 BRIDGER 2017C009 U2 SDCC REPLA	A	50,423				50,423	-	
27473620 BRIDGER 2016C114 U3 SDCC REPLA			50,349			50,349		
27493753 BRIDGER 2017C092 BLANKET - SID					50,041	50,041		
27481642 BRIDGER 2017C061 U2 REPLACE 21		49,992			4	49,992		
27453575 BRIDGER 2016C006 WASTE LIQUOR					49,944	49,944		
27449550 BRIDGER 2015C101 REBUILD BUS 3	5	40.530			49,549	49,549		
27401264 BRIDGER 2013C036 BCP MOTOR RI		49,530	+			49,530		
27398715 JIM BRIDGER UNIT#1REDUNDANT I 27499335 BRIDGER 2017C062 UPGRADE 7.2 F			+		48,770	49,195 48,770		
27445782 BRIDGER 2017C062 UPGRADE 7.2 N 27445782 BRIDGER 2015C086 REBUILD SDCC	B.		+		48,770	48,770		
27443782 BRIDGER 2015C086 REBUILD SDCC 27470108 BRIDGER 2015C082 REPLACE TAXES					48,164	48,164		
27514206 BRIDGER 2013C082 REPLACE TAXES	-		+		47,476	47,484		
27371165 BRIDGER 2012C068 RELINE NORTH			+		47,408	47,408		
27407589 BRIDGER 2014C033 U1 MILL RISER					,.50	47,140		
27525070 BRIDGER 2019C050 U3 FEEDWATE			47,027			47,027		
27467792 BRIDGER 2016C074 91 SURGE BIN					46,829	46,829		
27443612 BRIDGER 2015C008 U3 REPLACE EC			46,827			46,827		
27505204 BRIDGER 2017C052 BLANKET - MIL	-				46,675	46,675		
27521503 BRIDGER 2018C127 U3 COOLING T	0		46,643			46,643		
27503134 BRIDGER 2018C068 BLANKET - SMA	A				46,183	46,183		
27507247 BRIDGER 2018C051 HEAT TRACE SY					45,847	45,847	·	
27407586 BRIDGER 2014C003 U1 REPLACE PF						45,837		
27367609 BRIDGER 2012C020 U4 PRECIPITAT				45,830		45,830		
27355521 BRIDGER 2011C054 THERMAL GNE					45,752	45,752		
27437081 BRIDGER 2015C056 U3 BOILER FEE			45,703			45,703		

Column C										
Company Comp	Project	Descr	U1	U2	U3	U4	BC	Total	Purpose	Project Description/Justification
March 1970 1	27405726	BRIDGER 2014C009 U1 BFPT ANNUN	45,346					45,346		
		BRIDGER 2011C202 OSISOFT PI SY								
March Marc	27493748	BRIDGER 2017C103 CONVEYOR BELT					45,034	45,034		
Page Page	27479289			45,001				45,001		
	27455304						44,885	44,885		
1995 1995	27463782	BRIDGER 2016C076 REPLACE EX-21					44,548	44,548		
Moderal Section Moderal Section Moderal	27378442						44,446	44,446		
Property Property	27405733	BRIDGER 2014C043 CONVEYOR BELT					44,291	44,291		
Applied Decode above Applied	27539560									
August A	27479358			43.943			,	43,943		
Ministra Strick Control of the Con										
				- /		43.849				
Mode Septical School				43.753		,				
				,			43.700			
MODIFICATION 19 Per 10 10 10 10 10 10 10 1										
				43.489			,			
Mode Mode	27487476	BRIDGER 2017C031 COMMON ANNUNC		43,403			42 964			
MODIFICATION MODI										
					12 7/16		42,033	,		
		BRIDGER 2019COSE HI NETWORK HA	42 522		42,330			42,550		
Model policida Mode			42,323				41 040			
MICHAEL PORTION MICHAEL PO										
			41 604				41,///			
Manual Processor Manual Proc			41,691		41 477					
		DRIDGER 2014C052 H4 MANN TUDS:	44 200		41,4/4					
2015-150 1,150 1			41,389		44.000					
					41,370					
272-9564 \$800000 2000000 0					44.055		41,357			
\$279.279 \$800.00 \$200.00 \$40.00					41,220					
		BRIDGER 2019C073 DUST COLLECTO					41,158			
\$\begin{array}{cccccccccccccccccccccccccccccccccccc						41,072				
	27435432	BRIDGER 2015C062 U3 SCRUBBER P			40,807					
		BRIDGER 2016C056 U4 REPLACE 13				40,728				
							40,515			
797-1978 BIOGRE 2016/00 D. OVERLAND C 93,668 93,768				40,405						
299888 BROGRE 2017/01/10 SENVICE WAN DE COURT 19.568						40,162				
1975 1975							39,745			
27245574 BROCK 2015000 RICKNO CS SIR C				39,668						
					39,268			39,268		
27283523 SRIDER 2015CLORD 72 RAS HO 38,969 38,9										
27851735 RROGER 2015COP SERVICES SURVIS							39,088			
2790254 BRODER 2018COPY UL SWC SMD 38,328 38,021 38,02				38,969						
2749151 SRDGER 2015CORE LONGWORD BELT	27451473						38,905	38,905		
2784375 BBDGER 2015COS HER TRACE SY		BRIDGER 2018C079 U1 SWCS SKID	38,328							
279.098.5 880GER 2012006 NEPF AC[VC 37,870 37,870 37,870 37,586 27,870 27,986 27,	27439125	BRIDGER 2015C066 CONVEYOR BELT					38,021	38,021		
27/27/28/18 BRIOGR 2017/000 REPLACE EX-21 37,586 37,586 27/26/28/38 BRIOGR 2012/000 US TACK BRE 37,467 37	27543725	BRIDGER 2019C084 HEAT TRACE SY					37,883	37,883		
27531196 BRIDGER 2015COLD 10 STACK REE	27503085	BRIDGER 2018C045 U1 BFPT AC/DC	37,870					37,870		
27599243 BRIOGR 2018C101 IL STACK BREE 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.468 37.	27479284						37,586	37,586		
27599243 BRIOGR 2018C101 IL STACK BREE 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.467 37.468 37.	27531196	BRIDGER 2019C033 LOADOUT CONVE					37,551	37,551		
2726525 BRIGGE PAZICAGOS UI 30 VOTAGE 37,118 37,118 37,018 37,118 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 37,018 3						37,467				
2736544 SINGER 2012C03 OWNTR LIQU 37,062 37,062 27297967 SINGER 2012C03 FEPLACE EXC 36,995 36,995 27297960 SINGER 2012C03 FEPLACE EXC 36,995 36,995 27297960 SINGER 2012C03 FEPLACE EXC 36,995 36,995 27297960 SINGER 2012C03 FEPLACE EXC 36,995 36,994 27297961 SINGER 2012C03 FEPLACE EXC 36,995 36,994 27297961 SINGER 2012C03 FEPLACE EXC 36,995 36,994 27297970 SINGER 2012C03 FEPLACE EXC 36,995 36,995 2729790 SINGER 2012C03 FEPLACE EXC 36,995 36,995 27299790 SINGER 2012C03 FEPLACE EXC 36,995 36,995 27299790 SINGER 2012C03 FEPLACE EXC 36,995 36,995 27299790 SINGER 2012C03 FEPLACE EXC 36,995 36,995 2729990 SINGER 2012C03 FEPLACE EXC 36,995 2729990 SINGER 201	27405725	BRIDGER 2014C008 U1 30 VOLTAGE	37,118							
## SHOGER 2017/2016 CAT OF CATE CATE ## SHOGER 2017/2016 CAT OF CATE CATE ## SHOGER 2017/2016 SHANET - FLE ## SHANET - F	27366434	BRIDGER 2012C063 02 WATER LIQU					37,062			
27497960 8RIGGER 2017C016 COAT 02 CARN	27396734	BRIDGER 2013C033 REPLACE CAC C								
Separation Sep										
27236723 BRIDGER 2015C095 PHYSICAL SECUL 27241775 BRIDGER 2015C091 CR BLANDFI 272437074 BRIDGER 2015C091 US SCHUBBER P 36,629 272437074 BRIDGER 2015C091 US SCHUBBER P 36,629 272437074 BRIDGER 2015C091 US REPLACE PR 36,629 272437074 BRIDGER 2015C091 US REPLACE PR 36,629 272437074 BRIDGER 2015C093 US REPLACE PR 36,835 36,297 36,297 3724790 BRIDGER 2015C093 US REPLACE PR 36,835 36,297 3724790 BRIDGER 2015C093 US APLICATION S 36,297 3724790 BRIDGER 2015C093 US APLICATION S 372453112 BRIDGER 2015C093 US APLICATION S 372519308 BRIDGER 2015C093 US APLICATION S 372519308 BRIDGER 2015C093 US APLICATION S 37246194 BRIDGE										
27471805 BRIDGER 2016COSP PHYSICAL SECU 36,662 36,662 27431775 BRIDGER 2016COSP UT SCRUBBER P 36,629 36,651 36,651										
27441715 BRIDGER 2015C0B1 CCR BI LANDE 36,651 36,651 36,652 36,672 36,774 BRIDGER 2015C006 U3 REPLACE PR 36,292 36,293 36,295 36,297 36,29										
27451576 BRIDGER 2015C007 UI SCRUBBER P 36,629										
27437074 BRIDGER 2015C005 US REPLACE PR			36.629				20,031			
27461816 BRIDGER 2016COS3 UA RPLC SILO 36,297 36,297			30,023		36 355			36,025		
27457190 BRIDGER 2015C094 SIDEWALK REPL 27450112 BRIDGER 2016C093 UA SDC & TRA 35,705 35,705 27450120 BRIDGER 2016C093 UA SDC & TRA 35,577 35,577 275513120 BRIDGER 2016C093 UA SDC & TRA 35,577 35,523 27519308 BRIDGER 2016C104 UA SDC REPLA 27470119 BRIDGER 2016C104 UA SDC REPLA 27470119 BRIDGER 2016C104 UA SDC REPLA 27470119 BRIDGER 2016C03 UA SDC & TRA 35,582 35,888 27470119 BRIDGER 2016C03 UA SDC REPLA 27503006 BRIDGER 2018C048 UI TURBINE GE 35,282 27503006 BRIDGER 2018C048 UI TURBINE GE 35,282 27503006 BRIDGER 2018C059 UI TURBINE GE 35,284 27503000 BRIDGER 2018C075 UI FEEDWATER 35,244 27503000 BRIDGER 2018C075 UI FEEDWATER 35,244 27503000 BRIDGER 2018C075 UI FEEDWATER 35,244 27447646 BRIDGER 2015C070 US ZSRUBBER 34,961 27447646 BRIDGER 2015C091 REPLACE OI TR 27447646 BRIDGER 2015C091 REPLACE OI TR 27547797 BRIDGER 2015C091 REPLACE OI TR 27547794 BRIDGER 2015C091 REPLACE O					30,333	36 707				
27470119 BRIDGER 2016C094 SIDEWALK REPL 35,770 35,705 35,705 35,705 3745312 BRIDGER 2016C033 U4 SDCC & TRA 35,577 35,577 35,577 35,577 35,577 36,5	27547290					30,237	35.822			
27451312 BRIDGER 2015C033 LA SDCC & TRA 35,577 35,523 35,523 35,523 27561650 BRIDGER 2015C013 UC CONTRACTOR 35,588 35,488 35,488 27470119 BRIDGER 2016C104 UA SDCC REPLA 35,379 35,379 35,379 35,379 27501006 BRIDGER 2016C104 UA SDCC REPLA 35,379 35,		BRIDGER 2016C004 SIDEWALK BEDI								
275519308 BRIDGER 2018C114 LUBRICATION S 35,522 35,523 35,523 5,523 5,525 5,52						25 577	33,703			
27519308 BRIDGER 2018C114 LUBRICATION S 35,488 35,488 35,488 27700119 BRIDGER 2018C104 U4 SDCC REPLA 35,379 35,379 35,379 27700186 BRIDGER 2018C048 U1 TURBINE GE 35,282 35,282 35,282 35,282 35,282 35,284 37700190						33,3//	35 533			
27470119 BRIDGER 2015C104 U4 SDCC REPLA 35,379 35,379 35,379										
27503096 BRIDGER 2018COMB UI TURBINE GE 35,282 35,282 35,282 35,282 35,284 35,284 36,274 36,274 37						25.220	35,488			
27441694 BRIDGER 2015COS3 U3 INSTALL DU 35,254 35,254 35,254 277503090 BRIDGER 2015COS3 U3 INSTALL DU 35,254 35,244 277503090 BRIDGER 2015COS3 U3 INSTALL DU 35,244 35,244 35,244 35,244 35,244 35,244 35,244 35,244 35,244 35,244 35,244 35,244 35,244 35,245 36,245			25.202			35,379				
27550200 BRIDGER 2018C075 UI FEEDWATER 35,244 S.5,248			35,282		25.257					
27552020 BRIDGER 2019C011 U3 503 NOZZLE 35,178 35,178 35,178 35,178 277457797 BRIDGER 2016/C/08 U3 SCRUBBER 34,961			25.24		35,254			35,254		
27457797 BRIDGER 2016/C/080 LV SCRUBBER 34,961 34,951 34			35,244		25.45-					
27447566 BRIDGER 2015C091 REPLACE 01 TR 34,532 34,532 2 27515767 BRIDGER 2019C058 REPLACE ON ME 34,531 34,5					35,178					
27517679 BRIDGER 2018C115 ADDITIONAL HE 34,531 34,531 34,531 27529754 BRIDGER 2019C058 REPLACE RO ME 34,516 34,516 27529974 BRIDGER 2018C087 92 SECONDARY 34,257 34,257 27531072 BRIDGER 2019C070 U3 ERV MODIF 34,210 34,210 34,210				34,961						
27559754 BRIDGER 2019C058 REPLACE RO ME 34,516 34,516 27509240 BRIDGER 2019C070 U3 ERV MODIFI 34,257 34,257 27531072 BRIDGER 2019C070 U3 ERV MODIFI 34,210 34,210										
27509240 BRIDGER 2018C087 92 SECONDARY 34,257 34,257 27531072 BRIDGER 2019C070 U3 ERV MODIFI 34,210 34,210							34,531			
27531072 BRIDGER 2019C070 U3 ERV MODIFI 34,210 34,210										
							34,257	34,257		
27439119 BRIDGER 2015C023 U3 NETWORK HA 34,025 34,025	27531072									
	27439119	BRIDGER 2015C023 U3 NETWORK HA			34,025			34,025		

Project	Descr	U1	U2	U3	U4	BC	Total	Purpose	Project Description/Justification
27410698	BRIDGER 2014C044 REWIND/CONVER					33,996	33,996		
27503061	BRIDGER 2018C004 U1 SDCC TU/SU	33,878					33,878		
27517149 27524331	BRIDGER 2017C075 REDUNDANT BCP					33,843 33,754	33,843 33,754		
27524331	BRIDGER 2018C111 POWERFILM FEE BRIDGER 2015C059 M&C MERCURY P					33,754	33,754		
27477406	BRIDGER 2017C006 U2 RPLC SILO		33,479			33,094	33,479		
27547305	BRIDGER 2019C106 ELECTRONIC OP		33,473			33,184	33,184		
27439120	BRIDGER 2015C034 U3 REPLACE DO			33,132		33,104	33,132		
27439118	BRIDGER 2015C022 NETWORK FIREW			33,132		33.072	33,072		
27429050	BRIDGER 2015C014 LOADOUT CONVE					33,036	33,036		
27371142	BRIDGER 2012C036 BLANKET - CON					32,978	32,978		
27441697	BRIDGER 2015C064 U4 SCRUBBER P				32,722		32,722		
27411891	BRIDGER 2014C041 U0 PURCHASE T					32,686	32,686		
27543727	BRIDGER 2019C086 REPLACE 91 LI					32,605	32,605		
27557169	BRIDGER 2020C078 U1 REPLACE PY	32,484					32,484		
27362900	BRIDGER 2012C029 U4 BF PMP TUR				32,456		32,456		
27471813	BRIDGER 2016C110 U4 42 BFPT-HP				32,251		32,251		
27383746	BRIDGER CITS2012C107 SIEM CONV					31,881	31,881		
27381703	BRIDGER 2012C081 CAC COOLER RE					31,826	31,826		
27437078	BRIDGER 2015C042 NVR CAMERA SE					31,714	31,714		
27409854	BRIDGER 2014C020 U1 LP HOOD SP	31,540				24.444	31,540		
27449549	BRIDGER 2015C099 LANDFILL STOR					31,441	31,441		
27435426 27435417	BRIDGER 2015C051 REPLACE EX-21 BRIDGER 2015C018 U3 3 OT VOLTA			31,222		31,396	31,396 31,222		
27435417	BRIDGER 2015C018 U3 3 U1 VOLTA BRIDGER 2014C011 U1 CIRC WATER	31,199		31,222			31,222		
27503076	BRIDGER 2018C038 U1 SDCC LINER	30,899					30,899		
27481640	BRIDGER 2017C024 U2 REPLACE 13	30,033	30,642				30,642		
27433302	BRIDGER 2015C027 U2 SDCC REPLA		30,070				30,070		
27470088	BRIDGER 2016C085 U4 RECOAT & R		,-,0		30,022		30,022		
27366418	BRIDGER 2012C014 FORKLIFT, DRE				.,.	29,967	29,967		
27457798	BRIDGER 2016C016 U4 BFPT ANNUN				29,864		29,864		
27365624	BRIDGER 2012C042 UPGRADE U4 MA				29,740		29,740		
27429051	BRIDGER 2015C020 BLANKET - ELE					29,643	29,643		
27507254	BRIDGER 2018C080 U1 EDS UPGRAD	29,091					29,091		
27499210	BRIDGER 2018C019 U1 SO3 NOZZLE	28,945					28,945		
27421238	BRIDGER 2014C051 U3 SDCC REPLA			28,911			28,911		
27529749	BRIDGER 2019C041 U3 PRECIPITAT			28,868			28,868		
27383741	BRIDGER 2013C017 U2 30 VOLTAGE		28,839				28,839		
27525021	BRIDGER 2019C016 U3 SDCC REPLA			28,725		20.542	28,725		
27364632	BRIDGER 2012C019 JLG MECHANICA			20.624		28,643	28,643		
27445712 27470089	BRIDGER 2015C069 U3 RELINE ECO BRIDGER 2016C089 RELINE 95 HEA			28,621		28,587	28,621 28,587		
27470089	BRIDGER 2015C089 RELINE 95 HEA BRIDGER 2015C073 U3 M&C MERCUR			28,551		28,387	28,551		
27439231	BRIDGER 2015C073 U2 M&C MERCUR		28,551	20,331			28,551		
27439232	BRIDGER 2015C075 U4 M&C MERCUR		20,331		28,551		28,551		
27501254	BRIDGER 2018C036 U1 SDCC REPLA	28,526			20,551		28,526		
27465191	BRIDGER 2016C025 U4 STACK HOOD	20,020			28,520		28,520		
27441687	BRIDGER 2015C015 U3 REPLACE BA			28,245			28,245		
27559539	BRIDGER 2020C084 U4 SCR LPA SC			·	28,078		28,078		
27396192	BRIDGER 2013C034 SAFETY SIGNS/					28,031	28,031		
27505221	BRIDGER 2018C037 U1 SDCC & TRA	27,958					27,958		
27519555	BRIDGER 2018C054 REPLACE 02 LI					27,843	27,843		
27560909	PAC-SPONS JOOA: JIM BRIDGER RE					27,582	27,582		
27441688	BRIDGER 2015C021 U3 SDCC & TRA			27,501			27,501		
27461814	BRIDGER 2016C040 U4 46 A&B FWH				26,999		26,999		
27436331	BRIDGER 2015C054 8832 CONTROLL					26,684	26,684		
27559496	BRIDGER 2020C038 REPLACE FORKL					26,384	26,384		
27409853 27511336	BRIDGER 2014C019 REPLACE EX-21 BRIDGER 2018C104 12 APH TRUNNI					26,016 25,798	26,016 25,798		
27449551	BRIDGER 2018C104 12 APH TRUNNI BRIDGER 2015C102 U0 - ACID BUI					25,798	25,764		
27551347	BRIDGER 2015C102 00 - ACID BUI BRIDGER 2020C017 BLANKET - SMA					25,764	25,764		
27543733	BRIDGER 2019C099 SAND AND SALT					25,636	25,636		
27467827	BRIDGER 2016C092 U4 MIST ELIMI				25,607	23,030	25,607		
27364633	BRIDGER 2012C024 U4 3A VOLTAGE				25,589		25,589		
27483703	BRIDGER 2017C022 U2 SO3 NOZZLE		25,442		-,		25,442		
27366419	BRIDGER 2012C027 U4 REPLACE DO		-, -		25,410		25,410		
27364635	BRIDGER 2012C034 NITROGEN GENE					25,029	25,029		
27470090	BRIDGER 2016C088 RPLC SMALL SE				-	24,968	24,968		
27523298	BRIDGER 2018C120 LIGHT EQUIPME					24,843	24,843		
27455303	BRIDGER 2016C005 MAIN TURBINE					24,825	24,825		
27412070	BRIDGER 2014C046 U1 #11 FEEDWA	24,779					24,779		
27524334	BRIDGER 2018C129 MAIN TURBINE					24,617	24,617		
27388380	BRIDGER 2013C012 REPLACE EX-21					24,296	24,296		
27367612	BRIDGER 2012C021 U4 REPLACE PR				24,117		24,117		
27507397	BRIDGER 2018C062 U2 SDCC REPLA		23,920				23,920		
27479285	BRIDGER 2017C045 U2 TURBINE GE	22.755	23,879				23,879		
27505207	BRIDGER 2018C020 U1 REPLACE DO	23,750			22.704		23,750		
27553270 27363131	BRIDGER 2020C067 U4 ULTRASONIC BRIDGER 2012C023 BLANKET SMALL				23,701	23,691	23,701		
27363131	BRIDGER 2012C023 BLANKET SMALL BRIDGER 2014C007 U1 SDCC TRANS	22,926				∠3,691	23,691 22,926		
21402030	DNIDGEN ZU14CUU7 U1 3DCC TRANS	22,320					44,320		l

Process 1985										
			U1		U3	U4	BC	Total	Purpose	Project Description/Justification
	27481639	BRIDGER 2017C021 U2 PRECIPITAT		22,603				22,603	·	
	27447648	BRIDGER 2015C092 MILLION GALLO		-			22,460	22,460		
Trigger Trig		BRIDGER 2020C042 U4 PRECIPITAT				22,207				
					22,178					
				22,089						
Decked 1,000 2,000 1,0										
Professor Prof		BRIDGER 2012C033 U4 SDCC/TRANS				21,862				
1,000 1,00										
						24.760	21,802			
	27421237	BRIDGER 2010C017 H2 SDCC TH/SH			21 520	21,700				
				21 225	21,330					
1945 1945				21,323			21 325			
					21.052		,			
1966-00-19-00-20-20-20-20-20-20-20-20-20-20-20-20-	27568617	BRIDGER 2020C101 U0 01B CHUTEW			, ,		21,044			
	27364629						20,957	20,957		
1945 1900							20,660	20,660		
	27379816	BRIDGER 2012C085 REPLACE GSU S			10,322	10,322		20,644		
	27447525	BRIDGER 2015C090 U3 RELAY ROOM			20,639			20,639		
June 2015 June							20,410			
			20,105							
200-2006 MISSESS MI										
1946 1950 1950 1960		BRIDGER 2014C028 BLANKET - SMA	40.07				19,900			
1946 1960										
19.100 19.1			19,391		10 276					
1,000 1,00					19,370		10 124			
Transport		BRIDGER DWYO2011C700 WYOMING S								
PARTICINA				18.814			10,010			
Triangle				10,014			18.751			
1,150 1,15										
17957278										
27888323 RRDOGE 2015/2008 LOCK 1997\$ 17.697 17.		BRIDGER 2019C087 GUNN MINE SUB								
\$2,445,50 BRODGE 2015/CRS LEG 27379814	BRIDGER 2012C073 RAINBOW ROOM					17,964	17,964			
2735728				17,697						
17,506		BRIDGER 2015C084 03 CAC INSTA					17,650	17,650		
17.288 1										
15/2015 BINDGR 2015009 13 PAPE UPP 1 1 1 1 1 1 1 1 1										
27543722 BINDER 2012COS BURNET MEC 04 16,780 16,780 16,780										
15/20 16/20 1							16,916			
2731198					16,780		46.740			
1531147 SROGER 2017050 IN ERPACE ROT 16,388 16,284 16,245 16,24										
2748977 SROGER 2017COS US DOUM ANA 1 16,244 16,245 16,266 16,26										
27437922 RRIGGER 2015C006 U3 SODUM ANA 16,244 16,244 16,242 16,242 17,243717 RRIGGER 2015C006 U3 SOZ DUSC			16 263				10,516			
15,242 15,242 15,242 15,242 15,242 15,242 15,242 15,242 15,242 15,243 15,244 15,244 1			10,203		16 244					
27367471 BRIDGER 2012/COAD 01 & 02 DIESE 16,206 16,206 17,2445 15,475 15,745				16.242	10,244					
27543454 SBIOGER 2018C033 U1 MAIN TURBS 16,180 15,745 15		BRIDGER 2012C043 01 & 02 DIESE		10,242			16.206			
27445713 BRIDGER 2015COBS RELINE 05 SC 15,745 15,745 15,745 17469333 BRIDGER 2017COS 3U 2 SOUNIM ANA 15,585 15,591 15,591 15,701			16,180				-,3			
2749383			.,				15,745			
2749288 BIDGER 2017C03 UZ SODIUM ANA 15,659 15,659 15,659 17,411882 BIDGER 2013COB UZ REVEA 15,542 15,547 15,	27463933									
2741882	27479288	BRIDGER 2017C053 U2 SODIUM ANA		15,659				15,659		
27465194 BRIDGER 2016C042 LW WEST WALL 15,470 15,470 15,470 15,470 17485778 BRIDGER 2017C050 REPLACE FIRE 15,475 15,347 15,34	27411882	BRIDGER 2014C018 U1 INSTALL NE	15,585					15,585		
15,465 1				15,542						
2746F791 BRIDGER 2015C091 US WEST WALL 15,347 15,347 15,347 15,347 2746F791 BRIDGER 2018C131 U3 MAIN TURB 15,317 15,313 15,313 15,313 2740F001 BRIDGER 2015C031 UANDFILL LAND 15,313						15,470				
15,317 BRIDGER 2016.072 UA SODUM ANA 15,318 15,318 15,317 15,31							15,465			
15,317 15,317 15,317 15,317 15,317 15,317 15,317 15,317 15,317 15,317 15,317 15,317 15,317 15,318 15,317 15,318 15,317 15,318 1				15,347						
15,313 1						15,331				
17386232 BRIDGER 70X2011CTR21004127 15,001 15,001 15,001 15,001 15,001 1738543 BRIDGER 2012C090 REPLACE ANODE 14,603					15,317		45.00			
14,603										
27443158 BRIDGER 2015:C08 T U3 MILL RISER 14,543 14,543 14,543 14,445										
14,445					14 542		14,003			
14,435					14,543		14 445			
14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,359 14,253 1										
14,292 14,292 14,292 14,292 14,292 14,292 14,293 1										
27566705 BRIDGER 2020C094 UD STAIR CASE 14,253 14										
27385484 BRIDGER 2012C092 REPLACE ANODE 14,160 14,160 14,160 27385230 BRIDGER 71852011CTR210044129 1 14,014 14,014 27386223 BRIDGER 71852011CTR21004578 1 13,905 13,905 27386223 BRIDGER 71852011CTR21004578 1 13,893 13,893 27564797 BRIDGER 01 2020/C/081 DUST COL 13,867 13,867 27349228 BRIDGER 2015C068 MERCURY ANALY 13,569 13,569 27445779 BRIDGER 2015C076 LANDFILL MONI 13,262 13,262										
14,014 14,014 14,014 127507249 18RIDGER 72BS2011CTR210044129 1 14,014 14,014 14,014 127507249 18RIDGER 2018C069 BLANKET - OFF 13,905										
27507249 BRIDGER 2018C069 BLANKET - OFF 13,905 13,905 13,905 27386223 BRIDGER TRS2011CTR210044578 1 13,893 13,893 27564797 BRIDGER DU 2020/C/081 DUST COL 13,867 13,867 27439228 BRIDGER 2015C068 MERCURY ANALY 13,569 13,569 27445779 BRIDGER 2015CO76 LANDFILL MON 13,262 13,262 3,262										
27386223 BRIDGER TZRS2011CTR210044578 1 13,893 13,893 27564797 BRIDGER UD 2020/C/081 DUST COL 13,867 13,867 27439228 BRIDGER 2015C068 MERCURY ANALY 13,569 13,569 27445779 BRIDGER 2015C076 LANDFILL MONI 13,262 13,262										
27564797 BRIDGER UD 2020/C/081 DUST COL 13,867 13,867 27439228 BRIDGER 2015C068 MERCURY ANALY 13,569 13,569 27445779 BRIDGER 2015C076 (ANDFILL MON) 13,262 13,262	27386223						13,893	13,893		
27439228 BRIDGER 2015C068 MERCURY ANALY 13,569 13,569 27445779 BRIDGER 2015C076 LANDFILL MONI 13,262 13,262	27564797	BRIDGER U0 2020/C/081 DUST COL					13,867	13,867		
		BRIDGER 2015C068 MERCURY ANALY		-						
27386231 BRIDGER TZRS2011CTR210044128 1 12,956 12,956										
	27386231	BRIDGER TZRS2011CTR210044128 1					12,956	12,956		

										·
	Project		U1	U2	U3	U4	ВС	Total	Purpose	Project Description/Justification
	27525023	BRIDGER 2019C018 U3 SDCC RETUR			12,956					
	27371245	BRIDGER TZRS2011CTR6 BUILD STE				-	12,900	12,900		
March Standard Standard 1,000 1,					12,601			12,601		
							12,331			
			12,230							
				12,213						
							12,121			
1,000 1,00			44.504	11,883						
Triple			11,681		11.541			,		
			11.641		11,641					
	27396236		11,041				11 604			
March 2010/00 to 97 Feb. 1,00 1										
					11.474		11,557			
1.000					11,474	11.402				
						,	11,385			
MISCAN M		BRIDGER 2015C095 LOW PRESSURE								
		BRIDGER 2015C036 U3 LP HOOD SP			11,040			11,040		
							11,002	11,002		
			10,880							
			1							
\$2,000 \$1,000 \$										
			0 002				10,004			
			3,333				9 537			
2720010										
							9,135			
	27473619						9,106			
	27396732	BRIDGER 2013C031 UPGRADE GE/BE					9,103	9,103		
2749715 BRODER SOLYCING SAME MERIODES 8,990 8,900	27501281	BRIDGER 2017C116 FROZEN FOOD M					9,097	9,097		
27.22731 ROBER 2015-000 SAME RETT IVE										
27951468								-,		
279.645 MROGRE 2000.000 MROSE PAUS MORE NO MEMORY										
72907248										
2748724 BRDGRE 2017/033 CANYARD NETW 8,569 8,569 2748726 BRDGRE 2017/033 CANYARD NETW 8,168 8,168 2748726 BRDGRE 2015/031 FREE PRINGUE 8,168 8,168 2748726 BRDGRE 2015/031 FREE PRINGUE 7,467 7,467 2748728 BRDGRE 2015/031 FREE PRINGUE 7,467 7,473 2748728 BRDGRE 2015/031 FREE PRINGUE 6,877 2759727 BRDGRE 2015/031 FREE PRINGUE 6,877 2759727 BRDGRE CTS.2015/CTS.20										
7248726 880568 7036007 F RESPORTED SOUTH SECTION										
2798021 800GR T285011CR10Q048591								-,		
27985212 8800GR TYZSJOLTCRIZUOM450 1										
27545956 88DGER 200000 SBANKET-MOT		BRIDGER TZRS2011CTR210044577 1					7,007			
27855290 88DGER 2015CAT DU FORMADE APM 6,855 6,857 6,857 6,855 727847986 88DGER 2015CAT DU FORMADE APM 6,855 6,675 6,675 6,675 727847986 88DGER 2015CAT DU FORMADE APM 6,855 6,675 6,675 6,675 72788019 88DGER 77825011CF10044622 1 6,579										
27297275 BBIOGR 2018CF4 U LUPGABOE APH 6.855 6.855 272984798 BBIOGR CTC2018CF5 DIGTAL V 6.667										
27847496 BINGER CITCAUSEGFS DIGITALY 6,675 6,575 6,575 27826179 BINGER TRANSDITERIZOUGAGE21 6,676 6,576 6,579 27826179 BINGER TRANSDITERIZOUGAGE23 9 6,576 6,575 27826178 BINGER TRANSDITERIZOUGAGE23 9 6,576 6,575 27826181 BINGER TRANSDITERIZOUGAGE23 9 6,676 6,575 27826179 BINGER TRANSDITERIZOUGAGE23 9 6,676 6,479 27826279 BINGER TRANSDITERIZOUGAGE24 1 6,479 6,479 27826279 BINGER TRANSDITERIZOUGAGE24 1 6,479 6,479 27826279 BINGER TRANSDITERIZOUGAGE24 1 6,468 6,468 27827931 BINGER CHITCAUSCACCO 6,575 27827931 BINGER CHITCAUSCACCO 6,575 27827938353 BINGER CHITCAUSCACCO 6,575 27826279 BINGER TRANSDITERIZOUGAGE24 1 6,272 6,252 27826279 BINGER TRANSDITERIZOUGAGE24 1 6,272 6,252 27826279 BINGER TRANSDITERIZOUGAGE24 1 6,272 6,272 27826279 BINGER TRANSDITERIZOUGAGE24 1 6,272 6,272 27826379 BINGER ZOUGCO LOUR KEEVIN			6.855				5,551			
7738619 8BOGR BTSSOILCTR210044621							6,675			
77412073 8 ROGER TRESOLITER 200404579 5,579 6,579 7788018 ROGER TRESOLITER 200404579 5,575 6,575 7788018 ROGER TRESOLITER 200404571 6,499 6,499 7788012 ROGER TRESOLITER 200404571 6,499 6,499 7788012 ROGER TRESOLITER 200404571 6,499 6,499 7788012 ROGER TRESOLITER 200404571 6,498 6,499 7788013 ROGER TRESOLITER 200404571 6,488 6,488 7788013 ROGER TRESOLITER 200404571 6,598 6,399 77881383 ROGER TRESOLITER 200404571 6,525 6,552 77881383 ROGER TRESOLITER 200404571 6,525 6,552 77881383 ROGER TRESOLITER 200404571 6,528 6,288 7788109 ROGER TRESOLITER 200404571 6,528 6,288 7788109 ROGER TRESOLITER 200404571 6,528 6,288 7788109 ROGER 2005000 ROGER 200500 ROG										
	27412073	BRIDGER CITS2013C775 TAGOUT R1					6,579	6,579		
SRIDGER TRXS201CR91 (MATRIX SRIDGER DATASCOCKSOT MOBILE RA 6,479 6,479	27386218	BRIDGER TZRS2011CTR210044623 9				-	6,575	6,575		
7249735										
2738538 BRIDGER CITS/2012/C/102 MATRIK										
SERIOGER 2015CL04 WAREHOUSE CAR 6,522 6,525										
SRIDGER TZSCD11CTR210044621										
RINGER 2015C09 PURCHASE LIGH 5,170 5,170										
SRIDGER 2015C097 PURCHASE LIGH 5,937 5,937										
27495893 SRIDGER CITC2013C3S (Y13 WAN 5,833 5,833 5,833 5,833 7,727 7,73643 7,736642 7,36642										
27493747 RINDER 2012C102 COAL RECEIVIN 5,704 5										
27378443 SRIDGER 2012C084 2012 PAVING - 5,359 5,359										
27429734 RIDGER DYS2007C807 MOBILE RA 5,114 5,114 5,114 27547494 RIDGER CITS2018C426 BARCODE S 4,998 4,998 27378444 RIDGER ZO12C086 2012 PAVING - 4,817 4,817 27396193 RIDGER ZO15C030 WINDOWS 4,697 4,697 27447523 RIDGER ZO15C030 WINDOWS 4,631 4,631 27549343 RIDGER ZO15C030 WINDOWS 4,631 4,631 27549343 RIDGER ZO15C030 WINDOWS 4,631 4,616 27378440 RIDGER ZO15C030 WINDOWS 4,697 273766927 RIDGER ZO15C030 WINDOWS 4,698 27386227 RIDGER ZO15C030 WINDOWS 4,090 27386227 RIDGER ZO15C030 WINDOWS 4,090 273141866 RIDGER ZO15C030 WINDOWS 4,090 27314186 RIDGER ZO15C030 WINDOWS 4,090 27314186 RIDGER ZO15C030 WINDOWS 4,090 27386227 RIDGER ZO15C030 WINDOWS 4,090 27386227 RIDGER ZO15C030 WINDOWS 4,090 27386227 RIDGER ZO15C030 WINDOWS 4,090 27386228 RIDGER ZO15C030 WINDOWS 4,090 27386229 RIDGER ZO15C030 WINDOWS 4,090 27386224 RIDGER ZO15C030 WINDOWS 4,090 27386225 4,090 27386226 4,090 2738627 4,090 2738627 4,090 2738627 4,090 2738627 4,090 2738627 4,090 2738627 4,090 2738627 4,090										
27378444 BRIDGER CITSZ018C426 BARCODE S 4,998										
17378444 BRIDGER 2012C086 2012 PAVING - 4,817 4,817								4,998		
A,697 A,69										
27447523 SRIDGER 2015C030 U3 LIPGRADE AP 4,631 4,631 4,631	27396193									
RIDGER CITS/2018C305 TAGOUT PR	27447523				4,631					
273784040 BRIDGER 2012C087 2012 PAVING - 4,298 4,298 273786692 BRIDGER 2012C74 GENERATION PRO 4,263 4,263 27386227 BRIDGER 2012C74 GENERATION PRO 4,090 4,090 2751/677 BRIDGER 2018C055 REPLACE FIRE 4,095 27411886 BRIDGER 2016C032 UI REPLACE PA 4,011 27549342 BRIDGER 2016C032 UI REPLACE PA 4,011 27586227 BRIDGER 2016C032 UI REPLACE PA 3753 3,753 37786227 BRIDGER 2012C048 UA BEPT TYC A 3,595 3,595	27549343	BRIDGER CITS2018C305 TAGOUT PR						4,616		
27376692 BRIDGER 2012C74 GENERATION PRO 4,263 4,263 4,263 4,263 4,263 27386227 BRIDGER 72RS2011CTR210044575 1 4,090 4,090 275157677 BRIDGER 2018C055 REPLACE FIRE 4,085 4,085 4,085 27411886 BRIDGER 2014C032 U1 REPLACE PA 4,011 4,011 27549342 BRIDGER CTC2018C666 WINDOWS F 3,753 3,753 3,753 27386224 BRIDGER CTC2018C66 WINDOWS F 3,753 3,757 3,727 27366427 BRIDGER 2012C048 U4 BPT T/C A 3,595 3,595										
27386227 SRIDGER 7ZRS2011CTR210044575 1 4,090	27376692	BRIDGER 2012C74 GENERATION PRO					4,263	4,263		
27411886 BRIDGER 2014C032 U1 REPLACE PA 4,011 4,011 27549342 BRIDGER CITCO18C666 WINDOWS F 3,753 3,753 27386224 BRIDGER TZRS2011CTR210044576 1 3,727 3,727 27366427 BRIDGER 0212C048 U4 BPT T/C A 3,595 3,595	27386227	BRIDGER TZRS2011CTR210044575 1					4,090	4,090		
27549342 BRIDGER CTC2018C666 WINDOWS F 3,753 3,753 27386224 BRIDGER TZRS201CTR210044576 1 3,727 3,727 27366427 BRIDGER Z021CM8 IJ & BPTT/C A 3,595 3,595							4,085			
27386224 BRIDGER TZRS2011CTR210044576 1 3,727 3,727 27366427 BRIDGER 2012C048 U4 BFPT T/C A 3,595 3,595			4,011							
27366427 BRIDGER 2012C048 U4 BFPT T/C A 3,595 3,595										
							3,727			
2/50092U PAC-5PUNS JUUA: JIM BRIUGEK RE 3,435 3,435						3,595				
	2/560920	PAC-SPONS JOUA: JIM BRIDGER RE			l .		3,435	3,435		I

Project	Descr	U1	U2	U3	U4	BC	Total	Purpose	Project Description/Justification
27505227	BRIDGER 2018C040 U1 COAL PIPE	3,394					3,394		
27567773	PAC-SPONSORED JOOA: JIM BRIDGE					3,350	3,350		
27475573	BRIDGER 2016C117 PLASMA/CUTTER					2,975	2,975		
27504951	BRIDGER CITS2017C478 BARCODE P					2,812	2,812		
27460872	BRIDGER TZRS2014CTR6 WY-RPLC-T					2,268	2,268		
27529758	BRIDGER 2019C076 BLANKET - OFF					2,033	2,033		
27365774	BRIDGER CITS2011C409 BARCODE P					1,980	1,980		
27475621	BRIDGER 2016C066 U4 UPGRADE AP				1,979		1,979		
27350329	BRIDGER 2011C047 BCP MOTOR REW					1,964	1,964		
27499204	BRIDGER 2017C115 U2 UPGRADE AP		1,918				1,918		
27542311	PAC-SPONS JOOA: JIM BRIDGER CA					1,508	1,508		
27517675	BRIDGER CITS2018C122 SYSLOG FO					1,472	1,472		
27371234	BRIDGER TZRS2010CTR6 REPLACE 2					1,401	1,401		
27367719	BRIDGER CITC 2011C 237 CY11 UP					1,208	1,208		
27457215	JOINT ASSET - JIM BRIDGER SC57					590	590		
27489697	BRIDGER 2017C079 BLANKET ASBES					547	547		
27560918	PAC-SPONS JOOA: JIM BRIDGER; R					504	504		
27385486	BRIDGER CITC2012C237 CY 12 N-D					378	378		
27367718	BRIDGER CITC 2011C 236 CY11 TE					190	190		
27560917	PAC-SPONS JOOA: JIM BRIDGER 10					127	127		
27521485	BRIDGER 2019C036 U3 HYDROGEN S			60			60		
	TOTAL	22,261,717	36,742,959	79,734,598	84,101,381	43,429,474	266,270,128		

Note: Idaho Power does not record investments by unit. The allocation between units presented above is the Company's estimate based on project descriptions.